Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

RCRA FACILITY GROUNDWATER, LEACHATE AND GAS REPORTING FORM

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

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

Facility Name: Equilon Enterprises LLC dba Shell Oil Products US

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

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

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

☐ LPC-160 Forms

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

☑ Groundwater Data (without LPC-160 Forms)

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

☐ Well Construction Information

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

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

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

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

☐ Gas Monitoring Reports

☑ Other (identify)

Copies of this submittal sent separately directly to Paula Stine and Gina Search with IEPA.

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

314 429 0100 tel
314 429 0462 fx

April 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 – 1st 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.

As a result of COVID-19 and the "Shelter-in-Place" Order issued by Illinois Governor Jay Pritzker, and guidance received from Illinois Environmental Protection Agency (IEPA) on April 8, 2020, an electronic version of the referenced report is being submitted to Mses. Paula Stine and Gina Search. Paper copies of this report will be submitted to the IEPA once the Order has been lifted.

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: 1st 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

1st Quarter 2020 Report

Roxana Interim Groundwater Monitoring Program

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

Project Number: 60619901
April 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 1st Quarter 2020 (1Q20) groundwater monitoring well gauging and sampling conducted in the Village of Roxana, Illinois (**Figure 1**). 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 August 5, 2010 letter from the Illinois Environmental Protection Agency (IEPA) to SOPUS (IEPA, 2010a), IEPA requested various site characterization and monitoring activities, along with initiation of the Interim Groundwater Monitoring Program. This program began in 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 SOPUS, IEPA, and URS Corporation (URS) to discuss the groundwater monitoring program and IEPA's general comments on the 4Q10 report. Subsequent modifications were incorporated during the 1st Quarter 2011 (1Q11) and 2nd Quarter 2011 (2Q11) Interim Groundwater Monitoring Program. Additional items and comments regarding the Interim Groundwater Monitoring Program were presented by IEPA in 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 the following existing 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 their 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 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring 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 Interim Groundwater Monitoring Program quarterly reports. This information is discussed in **Section 3**. 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).

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 1Q20 to meet the requirements of the Interim Groundwater Monitoring Program, as specified in the above guidances. **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), and as modified based on other correspondence described in **Section 1**.

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 November 1, 2018 (AECOM, 2018c).

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 1Q20:

- Depth to bottom measurements were collected from the groundwater monitoring wells in the Interim Groundwater Monitoring Program and compared to corresponding well construction information. No wells contained sediment above redevelopment criteria in the SOP (10% screen occlusion for sampled wells, and 75% screen occlusion for gauged-only wells); no redevelopment is necessary.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between January 2 and 3, 2020. The 1Q20 gauging activities were conducted in conjunction with the 1Q20 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 January 6 and 13, 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, P-93C, 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 wells P-93B and P-93D were purged and sampled using dedicated stainless steel QED Environmental Systems (QED) Well Wizard® groundwater sampling pumps (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 (≤ 500 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 A**.

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 B**.

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

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

2.6 Data Quality Review and Data Management

Laboratory data were provided in electronic form and included data qualifiers on the basis of the laboratory's quality control or to indicate sample analysis information. The data were independently reviewed and qualified by AECOM. One hundred percent of the data were subjected to a data quality review and ten percent of the data were further subjected to Level 4 data validation. Evaluation of the data followed procedures outlined in the USEPA National Functional Guidelines for 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 B**. 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 electronic laptop; and
- Safety documentation.

3 Groundwater Sampling Results

This section presents the results of the 1Q20 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 1Q20 event was conducted between January 2 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 fallen approximately 0.5 to 1.5 feet since the 4Q19 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 remained similar to the 4Q19 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 1Q20 event. The potentiometric surface observed during the 1Q20 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates groundwater flow toward the WRR groundwater production wells.

During the 1Q20 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 0.05 to 0.62 feet. **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 1Q20 gauging event. LNAPL was not observed in groundwater monitoring wells located in the Village.

During 1Q20, LNAPL was observed in groundwater monitoring well P-58 located on WRR property at a thickness greater than 0.10 feet and was removed using bailers. The recovered LNAPL was placed in a double-walled lube cube located on the WRR North Property, the contents of which are taken to the WRR oil-water separators for reprocessing.

3.2 Data Quality Review Results

A total of 7 sample delivery groups (SDGs) were prepared and sent to TestAmerica for the 1Q20 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 1Q20 are presented in **Appendix B**.

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 11 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 pentachlorophenol results, the laboratory re-analyzed and/or re-extracted and analyzed for pentachlorophenol in several samples. The extraction holding time was exceeded for the re-extracted samples; however, the results from these analyses 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 B**.

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 4Q19 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 results for pentachlorophenol in wells MW-4, MW-6B, MW-7, MW-8, MW-14, MW-22, MW-23, MW-24, P-54, and 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 13 groundwater monitoring wells in the Interim Groundwater Monitoring Program (five in the Village, seven in the WRR along the West Fenceline, one in the WRR on West Property) exhibited exceedances of the groundwater screening criteria for one or more of the following constituents:

- Benzene
- 1,2,4-Trimethylbenzene
- bis(2-Ethylhexyl)phthalate
- Pentachlorophenol
- Methyl tert-Butyl Ether (MTBE)
- Benzo(a)anthracene
- 2-Methylnaphthalene
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 1Q20. **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 C 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 C-1**.

AECOM conducted the 1Q20 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

– During 1Q20, groundwater level data indicate groundwater flow from the Investigation Area is moving toward groundwater production wells at the WRR. Groundwater levels in most wells in the vicinity of the West Fenceline have fallen approximately 0.5 to 1.5 feet since the 4Q19 gauging event. Groundwater levels in most wells in the

[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.

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 remained similar to the previous quarter.

- The analytical results from 1Q20 are generally similar to those from previous quarters, with the exception of initial pentachlorophenol results in several samples. Re-analyzed and/or re-extracted pentachlorophenol results were generally consistent with those from previous quarters.

3.4 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.

4 References

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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											
2Q17	442.65	4/3/2017	NE	38.72	NA	NA	NA	403.93	393.85 - 383.85 (48.80 - 58.80)	0.0	*
3Q17		7/5/2017	NE	37.24	NA	NA	NA	405.41		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	*
MW-02											
2Q17	443.77	4/3/2017	NE	39.97	NA	NA	NA	403.80	393.90 - 383.90 (49.87 - 59.87)	181	*
3Q17		7/5/2017	NE	38.69	NA	NA	NA	405.08		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	*
MW-03											
2Q17	430.08	4/3/2017	NE	26.10	NA	NA	NA	403.98	395.41 - 385.41 (34.67 - 44.67)	0.0	*
3Q17		7/5/2017	NE	24.17	NA	NA	NA	405.91		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	*
MW-04											
2Q17	441.14	4/3/2017	NE	37.17	NA	NA	NA	403.97	396.08 - 386.08 (45.06 - 55.06)	24.8	*
3Q17		7/5/2017	NE	35.65	NA	NA	NA	405.49		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	*

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MW-05											
2Q17	429.80	4/3/2017	NE	25.75	NA	NA	NA	404.05	395.83 - 385.83 (33.97 - 43.97)	3.5	*
3Q17		7/5/2017	NE	23.96	NA	NA	NA	405.84		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	*
MW-06A											
2Q17	432.14	4/3/2017	NE	27.78	NA	NA	NA	404.36	397.31 - 387.31 (34.83 - 44.83)	1.4	*
3Q17		7/5/2017	NE	26.11	NA	NA	NA	406.03		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	*
MW-06B											
2Q17	432.29	4/3/2017	NE	27.89	NA	NA	NA	404.40	368.24 - 363.24 (64.05 - 69.05)	0.0	*
3Q17		7/5/2017	NE	26.16	NA	NA	NA	406.13		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	*
MW-06C											
2Q17	432.11	4/3/2017	NE	27.61	NA	NA	NA	404.50	347.16 - 342.16 (84.95 - 89.95)	4.9	*
3Q17		7/5/2017	NE	25.96	NA	NA	NA	406.15		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	*

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MW-06D											
2Q17	431.99	4/3/2017	NE	27.47	NA	NA	NA	404.52	327.27 - 322.27 (104.72 - 109.72)	0.0	*
3Q17		7/5/2017	NE	25.83	NA	NA	NA	406.16		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	*
MW-07											
2Q17	443.10	4/3/2017	NE	39.09	NA	NA	NA	404.01	400.18 - 390.18 (42.92 - 52.92)	15000	*
3Q17		7/5/2017	NE	37.82	NA	NA	NA	405.28		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	*
MW-08											
2Q17	434.11	4/3/2017	NE	30.15	NA	NA	NA	403.96	400.51 - 390.51 (33.60 - 43.60)	15000	*
3Q17		7/5/2017	NE	28.55	NA	NA	NA	405.56		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	*
MW-09											
2Q17	445.20	4/3/2017	NE	40.56	NA	NA	NA	404.64	398.75 - 388.75 (46.45 - 56.45)	0.0	*
3Q17		7/5/2017	NE	38.89	NA	NA	NA	406.31		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	*

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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-10											
2Q17	445.03	4/3/2017	NE	40.32	NA	NA	NA	404.71	400.60 - 390.60 (44.43 - 54.43)	0.0	*
3Q17		7/5/2017	NE	38.95	NA	NA	NA	406.08		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	*
MW-11											
2Q17	442.33	4/3/2017	NE	38.10	NA	NA	NA	404.23	400.67 - 390.67 (41.66 - 51.66)	0.0	*
3Q17		7/5/2017	NE	36.46	NA	NA	NA	405.87		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	*
MW-12											
2Q17	442.60	4/3/2017	NE	38.56	NA	NA	NA	404.04	400.68 - 390.68 (41.92 - 51.92)	0.0	*
3Q17		7/5/2017	NE	36.84	NA	NA	NA	405.76		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	*
MW-13											
2Q17	430.27	4/5/2017	NE	25.90	NA	NA	NA	404.37	404.70 - 394.70 (25.57 - 35.57)	98.7	
3Q17		7/6/2017	NE	23.67	NA	NA	NA	406.60		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	*

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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-14											
2Q17	434.44	4/4/2017	NE	29.91	NA	NA	NA	404.53	401.02 - 391.02 (33.42 - 43.42)	84.4	*
3Q17		7/6/2017	NE	28.34	NA	NA	NA	406.10		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	*
MW-16											
2Q17	443.39	4/3/2017	NE	39.51	NA	NA	NA	403.88	406.33 - 396.33 (37.06 - 47.06)	0.0	
3Q17		7/5/2017	NE	38.18	NA	NA	NA	405.21		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	
MW-17											
2Q17	441.57	4/3/2017	NE	37.62	NA	NA	NA	403.95	407.28 - 392.28 (34.29 - 49.29)	0.0	
3Q17		7/5/2017	NE	36.74	NA	NA	NA	404.83		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	
MW-18											
2Q17	442.04	4/3/2017	NE	38.19	NA	NA	NA	403.85	407.12 - 392.12 (34.92 - 49.92)	0.0	
3Q17		7/5/2017	NE	37.38	NA	NA	NA	404.66		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	

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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											
2Q17	442.77	4/3/2017	NE	38.93	NA	NA	NA	403.84	406.43 - 391.43 (36.34 - 51.34)	0.0	
3Q17		7/5/2017	NE	37.93	NA	NA	NA	404.84		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	
MW-20											
2Q17	443.67	4/3/2017	NE	39.93	NA	NA	NA	403.74	407.79 - 392.79 (35.88 - 50.88)	0.0	
3Q17		7/5/2017	NE	38.69	NA	NA	NA	404.98		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	
MW-21											
2Q17	443.81	4/3/2017	NE	39.95	NA	NA	NA	403.86	408.80 - 393.80 (35.01 - 50.01)	0.0	
3Q17		7/5/2017	NE	38.74	NA	NA	NA	405.07		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	
MW-22											
2Q17	442.16	4/3/2017	NE	38.20	NA	NA	NA	403.96	404.28 - 394.28 (37.88 - 47.88)	4.7	
3Q17		7/5/2017	NE	36.89	NA	NA	NA	405.27		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	*

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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											
2Q17	431.41	4/3/2017	NE	27.40	NA	NA	NA	404.01	402.39 - 392.39 (29.02 - 39.02)	0.2	*
3Q17		7/5/2017	NE	25.08	NA	NA	NA	406.33		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	*
MW-24											
2Q17	443.42	4/3/2017	NE	39.45	NA	NA	NA	403.97	404.53 - 394.53 (38.89 - 48.89)	0.8	
3Q17		7/5/2017	NE	37.75	NA	NA	NA	405.67		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	*
MW-25											
2Q17	438.35	4/3/2017	NE	34.33	NA	NA	NA	404.02	402.76 - 392.76 (35.59 - 45.59)	83.6	*
3Q17		7/5/2017	NE	32.77	NA	NA	NA	405.58		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	*
MW-26											
2Q17	441.02	4/3/2017	NE	37.09	NA	NA	NA	403.93	402.87 - 392.87 (38.15 - 48.15)	0.0	*
3Q17		7/5/2017	NE	35.60	NA	NA	NA	405.42		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	*

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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-27											
2Q17	443.40	4/3/2017	NE	38.58	NA	NA	NA	404.82	403.61 - 393.61 (39.79 - 49.79)	0.0	*
3Q17		7/5/2017	NE	37.35	NA	NA	NA	406.05		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	*
MW-28											
2Q17	443.34	4/3/2017	NE	37.78	NA	NA	NA	405.56	409.73 - 399.73 (33.61 - 43.61)	0.0	
3Q17		7/5/2017	NE	36.63	NA	NA	NA	406.71		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	
P-01											
2Q17	442.73	4/4/2017	NE	30.25	NA	NA	NA	412.48	380.78 - 375.78 (61.95 - 66.95)	0.0	*
3Q17		7/5/2017	NE	26.73	NA	NA	NA	416.00		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	*
P-4U											
2Q17	442.54	4/4/2017	NE	31.39	NA	NA	NA	411.15	361.39 - 359.39 (81.15 - 83.15)	0.0	*
3Q17		7/5/2017	NE	28.12	NA	NA	NA	414.42		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	*

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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											
2Q17	443.84	4/4/2017	NE	31.52	NA	NA	NA	412.32	303.44 - 301.44 (140.40 - 142.40)	0.0	*
3Q17		7/5/2017	NE	27.33	NA	NA	NA	416.51		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	*
P-5U											
2Q17	444.24	4/4/2017	NE	32.69	NA	NA	NA	411.55	313.61 - 311.61 (130.63 - 132.63)	0.0	*
3Q17		7/5/2017	NE	29.11	NA	NA	NA	415.13		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	*
P-6U											
2Q17	443.45	4/4/2017	NE	32.11	NA	NA	NA	411.34	362.95 - 360.95 (80.50 - 82.50)	0.0	*
3Q17		7/5/2017	NE	28.50	NA	NA	NA	414.95		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	*
P-7U											
2Q17	443.91	4/4/2017	NE	32.37	NA	NA	NA	411.54	382.83 - 380.83 (61.08 - 63.08)	0.1	*
3Q17		7/5/2017	NE	28.52	NA	NA	NA	415.39		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	*

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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-8U											
2Q17	441.85	4/3/2017	NE	31.88	NA	NA	NA	409.97	382.33 - 380.33 (59.52 - 61.52)	0.0	*
3Q17		7/6/2017	NE	29.86	NA	NA	NA	411.99		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	*
P-9U											
2Q17	445.04	4/3/2017	NE	36.30	NA	NA	NA	408.74	344.45 - 342.45 (100.59 - 102.59)	0.0	*
3Q17		7/6/2017	NE	34.22	NA	NA	NA	410.82		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	*
P-11L											
2Q17	442.55	4/4/2017	NE	33.01	NA	NA	NA	409.54	332.34 - 330.34 (110.21 - 112.21)	0.0	*
3Q17		7/6/2017	NE	31.05	NA	NA	NA	411.50		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	*
P-11U											
2Q17	443.17	4/4/2017	NE	33.61	NA	NA	NA	409.56	343.25 - 341.25 (99.92 - 101.92)	0.7	*
3Q17		7/6/2017	NE	31.65	NA	NA	NA	411.52		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	*

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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											
2Q17	442.74	4/4/2017	NE	30.33	NA	NA	NA	412.41	395.41 - 385.41 (47.33 - 57.33)	0.0	*
3Q17		7/5/2017	NE	26.80	NA	NA	NA	415.94		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	*
P-15											
2Q17	443.69	4/4/2017	NE	32.12	NA	NA	NA	411.57	398.24 - 388.24 (45.45 - 55.45)	0.0	*
3Q17		7/5/2017	NE	28.75	NA	NA	NA	414.94		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	*
P-16											
2Q17	442.68	4/4/2017	NE	30.99	NA	NA	NA	411.69	396.94 - 386.94 (45.74 - 55.74)	0.0	*
3Q17		7/5/2017	NE	27.40	NA	NA	NA	415.28		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	*
P-43											
2Q17	444.44	4/4/2017	NE	34.52	NA	NA	NA	409.92	380.88 - 370.88 (63.56 - 73.56)	0.0	*
3Q17		7/6/2017	NE	31.87	NA	NA	NA	412.57		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	*

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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-53											
2Q17	446.41	4/3/2017	NE	40.04	NA	NA	NA	406.37	407.91 - 382.91 (38.50 - 63.50)	0.0	
3Q17		7/5/2017	NE	38.70	NA	NA	NA	407.71		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	*
P-54											
2Q17	442.32	4/3/2017	NE	38.28	NA	NA	NA	404.04	404.32 - 379.32 (38.00 - 63.00)	0.0	
3Q17		7/5/2017	NE	36.41	NA	NA	NA	405.91		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	*
P-55R											
2Q17	443.79	4/3/2017	39.06	39.34	404.45	404.73	0.28	404.67	403.36 - 393.36 (40.43 - 50.43)	155	*
3Q17		7/5/2017	37.88	37.97	405.82	405.91	0.09	405.89		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	405.63	406.13	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	*
P-56											
2Q17	446.14	4/3/2017	NE	42.43	NA	NA	NA	403.71	405.32 - 380.32 (40.82 - 65.82)	0.0	
3Q17		7/5/2017	NE	41.18	NA	NA	NA	404.96		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	

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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											
2Q17	446.96	4/3/2017	NE	43.21	NA	NA	NA	403.75	402.77 - 392.77 (44.19 - 54.19)	140	*
3Q17		7/5/2017	NE	41.92	NA	NA	NA	405.04		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	*
P-58											
2Q17	444.94	4/3/2017	NE	40.91	NA	NA	NA	404.03	404.73 - 379.73 (40.21 - 65.21)	0.0	
3Q17		7/5/2017	NE	39.81	NA	NA	NA	405.13		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	*
P-59											
2Q17	446.86	4/3/2017	NE	43.06	NA	NA	NA	403.80	398.95 - 373.95 (47.91 - 72.91)	359	*
3Q17		7/5/2017	NE	42.08	NA	NA	NA	404.78		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	*
P-60											
2Q17	446.69	4/3/2017	42.49	42.52	404.17	404.20	0.03	404.19	403.24 - 383.24 (43.45 - 63.45)	43.2	*
3Q17		7/5/2017	41.49	41.51	405.18	405.20	0.02	405.20		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	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-61											
2Q17	444.47	4/3/2017	40.50	40.61	403.86	403.97	0.11	403.95	398.80 - 373.80 (45.68 - 70.68)	8.2	*
3Q17		7/6/2017	39.60	39.71	404.76	404.87	0.11	404.85		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	*
P-62											
2Q17	442.43	4/3/2017	38.04	38.13	404.30	404.39	0.09	404.37	400.96 - 375.96 (41.47 - 66.47)	188	*
3Q17		7/5/2017	37.28	37.33	405.10	405.15	0.05	405.14		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	*
P-63											
2Q17	445.85	4/3/2017	41.66	41.69	404.16	404.19	0.03	404.18	398.56 - 373.56 (47.29 - 72.29)	106	*
3Q17		7/6/2017	40.97	41.01	404.84	404.88	0.04	404.87		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	*
P-64											
2Q17	446.89	4/4/2017	43.10	43.18	403.71	403.79	0.08	403.77	399.66 - 374.66 (47.23 - 72.23)	71.8	*
3Q17		7/6/2017	42.09	42.16	404.73	404.80	0.07	404.79		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	*

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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											
2Q17	444.60	4/3/2017	NE	40.08	NA	NA	NA	404.52	397.58 - 372.58 (47.02 - 72.02)	70.7	*
3Q17		7/6/2017	NE	39.89	NA	NA	NA	404.71		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	*
P-66											
2Q17	436.81	4/4/2017	NE	32.55	NA	NA	NA	404.26	402.09 - 377.09 (34.72 - 59.72)	112	*
3Q17		7/6/2017	NE	31.32	NA	NA	NA	405.49		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	*
P-67											
2Q17	444.10	4/4/2017	NE	38.85	NA	NA	NA	405.25	402.12 - 377.12 (41.98 - 66.98)	4.3	*
3Q17		7/6/2017	NE	37.52	NA	NA	NA	406.58		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	*
P-68											
2Q17	445.18	4/3/2017	41.02	41.07	404.11	404.16	0.05	404.15	399.92 - 374.92 (45.26 - 70.26)	77.8	*
3Q17		7/5/2017	40.10	40.12	405.06	405.08	0.02	405.08		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	*

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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-69											
2Q17	443.40	4/3/2017	NE	39.55	NA	NA	NA	403.85	402.58 - 377.58 (40.82 - 65.82)	66.6	*
3Q17		7/5/2017	NE	38.76	NA	NA	NA	404.64		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	*
P-70											
2Q17	442.95	4/3/2017	38.81	38.84	404.11	404.14	0.03	404.13	398.28 - 373.28 (44.67 - 69.67)	132	*
3Q17		7/6/2017	38.00	38.03	404.92	404.95	0.03	404.94		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	*
P-71											
2Q17	444.94	4/3/2017	NE	40.43	NA	NA	NA	404.51	402.33 - 377.33 (42.61 - 67.61)	32.3	*
3Q17		7/6/2017	NE	39.66	NA	NA	NA	405.28		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	*
P-72											
2Q17	444.49	4/3/2017	NE	39.66	NA	NA	NA	404.83	398.72 - 373.72 (45.77 - 70.77)	11.3	*
3Q17		7/6/2017	NE	39.27	NA	NA	NA	405.22		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

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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											
2Q17	443.86	4/3/2017	NE	39.55	NA	NA	NA	404.31	402.27 - 377.27 (41.59 - 66.59)	81.4	*
3Q17		7/6/2017	NE	39.59	NA	NA	NA	404.27		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	*
P-74											
2Q17	442.72	4/3/2017	NE	38.88	NA	NA	NA	403.84	398.29 - 373.29 (44.43 - 69.43)	0.0	*
3Q17		7/5/2017	NE	38.04	NA	NA	NA	404.68		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	*
P-75											
2Q17	446.42	4/4/2017	NE	42.19	NA	NA	NA	404.23	403.29 - 378.29 (43.13 - 68.13)	30.9	*
3Q17		7/6/2017	NE	42.45	NA	NA	NA	403.97		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	*
P-82A											
2Q17	435.02	4/4/2017	NE	26.88	NA	NA	NA	408.14	401.81 - 386.81 (33.21 - 48.21)	0.0	*
3Q17		7/6/2017	NE	24.70	NA	NA	NA	410.32		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	*

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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-82B											
2Q17	434.48	4/4/2017	NE	26.61	NA	NA	NA	407.87	370.88 - 368.88 (63.60 - 65.60)	0.0	*
3Q17		7/6/2017	NE	24.42	NA	NA	NA	410.06		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	*
P-82C											
2Q17	434.21	4/4/2017	NE	26.30	NA	NA	NA	407.91	351.44 - 349.44 (82.77 - 84.77)	0.0	*
3Q17		7/6/2017	NE	24.12	NA	NA	NA	410.09		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	*
P-82D											
2Q17	434.89	4/4/2017	NE	27.09	NA	NA	NA	407.80	323.47 - 321.47 (111.42 - 113.42)	0.0	*
3Q17		7/6/2017	NE	24.90	NA	NA	NA	409.99		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	*
P-83A											
2Q17	445.36	4/3/2017	NE	39.56	NA	NA	NA	405.80	398.71 - 383.71 (46.65 - 61.65)	0.0	*
3Q17		7/6/2017	NE	38.15	NA	NA	NA	407.21		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	*

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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-83B											
2Q17	445.55	4/3/2017	NE	39.83	NA	NA	NA	405.72	375.90 - 373.90 (69.65 - 71.65)	11.0	*
3Q17		7/6/2017	NE	38.71	NA	NA	NA	406.84		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	*
P-83C											
2Q17	445.78	4/3/2017	NE	39.96	NA	NA	NA	405.82	353.39 - 351.39 (92.39 - 94.39)	1.4	*
3Q17		7/6/2017	NE	38.56	NA	NA	NA	407.22		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	*
P-83D											
2Q17	445.70	4/3/2017	NE	39.94	NA	NA	NA	405.76	311.99 - 309.99 (133.71 - 135.71)	0.0	*
3Q17		7/6/2017	NE	38.51	NA	NA	NA	407.19		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 (133.80 - 135.80)	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	*
P-84A											
2Q17	446.49	4/4/2017	NE	40.80	NA	NA	NA	405.69	397.99 - 382.99 (48.50 - 63.50)	0.0	*
3Q17		7/5/2017	NM	NM	NA	NA	NA	NA		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	*

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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-84B											
2Q17	446.21	4/4/2017	NE	40.54	NA	NA	NA	405.67	372.71 - 370.71 (73.50 - 75.50)	0.0	*
3Q17		7/5/2017	NM	NM	NA	NA	NA	NA		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	*
P-84C											
2Q17	446.22	4/4/2017	NE	40.54	NA	NA	NA	405.68	352.17 - 350.17 (94.05 - 96.05)	0.0	*
3Q17		7/5/2017	NM	NM	NA	NA	NA	NA		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	*
P-84D											
2Q17	446.24	4/4/2017	NE	40.55	NA	NA	NA	405.69	325.09 - 323.09 (121.15 - 123.15)	0.0	*
3Q17		7/5/2017	NM	NM	NA	NA	NA	NA		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	*
P-88A											
2Q17	443.09	4/4/2017	NE	32.36	NA	NA	NA	410.73	404.69 - 389.69 (38.40 - 53.40)	0.0	*
3Q17		7/6/2017	NE	30.57	NA	NA	NA	412.52		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	*

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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-88B											
2Q17	443.16	4/4/2017	NE	32.43	NA	NA	NA	410.73	371.16 - 369.16 (72.00 - 74.00)	0.0	*
3Q17		7/6/2017	NE	30.64	NA	NA	NA	412.52		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	*
P-88C											
2Q17	443.13	4/4/2017	NE	32.38	NA	NA	NA	410.75	350.83 - 348.83 (92.30 - 94.30)	0.0	*
3Q17		7/6/2017	NE	30.60	NA	NA	NA	412.53		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	*
P-88D											
2Q17	443.20	4/4/2017	NE	32.54	NA	NA	NA	410.66	329.50 - 327.50 (113.70 - 115.70)	0.0	*
3Q17		7/6/2017	NE	30.69	NA	NA	NA	412.51		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	*
P-89B											
2Q17	447.44	4/4/2017	NE	39.32	NA	NA	NA	408.12	370.08 - 368.08 (77.36 - 79.36)	0.0	*
3Q17		7/6/2017	NE	37.49	NA	NA	NA	409.95		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	*

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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-89C											
2Q17	447.76	4/4/2017	NE	39.66	NA	NA	NA	408.10	350.13 - 348.13 (97.63 - 99.63)	0.0	*
3Q17		7/6/2017	NE	37.85	NA	NA	NA	409.91		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	*
P-89D											
2Q17	447.63	4/4/2017	NE	39.51	NA	NA	NA	408.12	307.29 - 305.29 (140.34 - 142.34)	0.0	*
3Q17		7/6/2017	NE	37.84	NA	NA	NA	409.79		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	*
P-91A											
2Q17	447.24	4/4/2017	44.61	44.64	402.60	402.63	0.03	402.62	395.72 - 380.72 (51.51 - 66.51)	43.8	*
3Q17		7/6/2017	43.18	43.21	404.03	404.06	0.03	404.05		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	*
P-91B											
2Q17	447.28	4/4/2017	NE	44.74	NA	NA	NA	402.54	372.59 - 370.59 (74.69 - 76.69)	6.7	*
3Q17		7/6/2017	NE	43.26	NA	NA	NA	404.02		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	*

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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											
2Q17	447.07	4/4/2017	NE	44.51	NA	NA	NA	402.56	352.34 - 350.34 (94.73 - 96.73)	0.0	*
3Q17		7/6/2017	NE	43.03	NA	NA	NA	404.04		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	*
P-91D											
2Q17	447.06	4/4/2017	NE	44.50	NA	NA	NA	402.56	278.74 - 276.74 (168.32 - 170.32)	0.1	*
3Q17		7/6/2017	NE	43.02	NA	NA	NA	404.04		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	*
P-92A											
2Q17	446.24	4/4/2017	42.38	42.40	403.84	403.86	0.02	403.86	398.67 - 383.67 (47.57 - 62.57)	55.5	*
3Q17		7/6/2017	41.87	41.89	404.35	404.37	0.02	404.37		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	*
P-92B											
2Q17	446.18	4/4/2017	NE	42.36	NA	NA	NA	403.82	372.53 - 370.53 (73.65 - 75.65)	0.0	*
3Q17		7/6/2017	NE	41.85	NA	NA	NA	404.33		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	*

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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-92C											
2Q17	446.17	4/4/2017	NE	42.35	NA	NA	NA	403.82	353.21 - 348.21 (92.96 - 97.96)	1.5	*
3Q17		7/6/2017	NE	41.85	NA	NA	NA	404.32		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	*
P-92D											
2Q17	446.00	4/4/2017	NE	42.19	NA	NA	NA	403.81	305.00 - 303.00 (141.00 - 143.00)	0.6	*
3Q17		7/6/2017	NE	41.73	NA	NA	NA	404.27		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	*
P-93A											
2Q17	445.12	4/3/2017	NE	41.16	NA	NA	NA	403.96	402.05 - 392.05 (43.07 - 53.07)	51.2	*
3Q17		7/5/2017	NE	40.10	NA	NA	NA	405.02		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	*
P-93B											
2Q17	446.52	4/3/2017	NE	42.51	NA	NA	NA	404.01	371.92 - 369.92 (74.60 - 76.60)	0.0	*
3Q17		7/5/2017	NE	41.45	NA	NA	NA	405.07		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	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-93C											
2Q17	446.28	4/3/2017	NE	42.31	NA	NA	NA	403.97	353.81 - 348.81 (92.47 - 97.47)	0.0	*
3Q17		7/5/2017	NE	41.26	NA	NA	NA	405.02		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	*
P-93D											
2Q17	446.73	4/3/2017	NE	42.72	NA	NA	NA	404.01	320.98 - 318.98 (125.75 - 127.75)	0.0	*
3Q17		7/5/2017	NE	41.65	NA	NA	NA	405.08		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	*
P-94											
2Q17	445.14	4/3/2017	NE	35.64	NA	NA	NA	409.50	399.29 - 384.29 (45.85 - 60.85)	0.0	*
3Q17		7/6/2017	NE	33.00	NA	NA	NA	412.14		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	*
P-95											
2Q17	443.42	4/4/2017	NE	30.40	NA	NA	NA	413.02	406.90 - 391.90 (36.52 - 51.52)	0.0	*
3Q17		7/6/2017	NE	28.61	NA	NA	NA	414.81		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	*

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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											
2Q17	444.97	4/4/2017	NE	33.68	NA	NA	NA	411.29	402.22 - 382.22 (42.75 - 62.75)	107	*
3Q17		7/6/2017	NE	31.80	NA	NA	NA	413.17		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	*
P-114R											
2Q17	429.26	4/5/2017	NE	24.93	NA	NA	NA	404.33	406.25 - 396.25 (23.01 - 33.01)	0.7	
3Q17		7/6/2017	NE	22.38	NA	NA	NA	406.88		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	*
P-115											
2Q17	433.36	4/5/2017	NE	29.20	NA	NA	NA	404.16	401.06 - 381.06 (32.30 - 52.30)	0.0	*
3Q17		7/6/2017	NE	26.28	NA	NA	NA	407.08		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 results anomalous
P-116											
2Q17	436.63	4/5/2017	NE	32.66	NA	NA	NA	403.97	399.19 - 379.19 (37.44 - 57.44)	0.0	*
3Q17		7/6/2017	NE	29.61	NA	NA	NA	407.02		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	*

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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											
2Q17	432.71	4/5/2017	NE	28.93	NA	NA	NA	403.78	399.78 - 379.78 (32.93 - 52.93)	0.0	*
3Q17		7/6/2017	NE	25.78	NA	NA	NA	406.93		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	*
P-118											
2Q17	431.31	4/5/2017	NE	27.92	NA	NA	NA	403.39	400.19 - 384.26 (31.12 - 47.05)	0.0	*
3Q17		7/6/2017	NE	24.45	NA	NA	NA	406.86		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	*
P-119											
2Q17	431.90	4/5/2017	NE	27.14	NA	NA	NA	404.76	401.23 - 385.30 (30.67 - 46.60)	0.0	*
3Q17		7/6/2017	NE	25.06	NA	NA	NA	406.84		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	*
P-120											
2Q17	432.82	4/5/2017	NE	27.55	NA	NA	NA	405.27	401.44 - 385.51 (31.38 - 47.31)	0.0	*
3Q17		7/6/2017	NE	25.10	NA	NA	NA	407.72		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	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-129											
2Q17	432.43	4/5/2017	NE	30.17	NA	NA	NA	402.26	400.46 - 384.53 (31.97 - 47.90)	0.0	*
3Q17		7/6/2017	NE	26.09	NA	NA	NA	406.34		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	*
ROST-3-MW											
2Q17	442.29	4/3/2017	NE	38.13	NA	NA	NA	404.16	404.48 - 394.48 (37.81 - 47.81)	248	
3Q17		7/5/2017	NE	36.64	NA	NA	NA	405.65		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	*
ROST-4-PZ											
2Q17	442.13	4/3/2017	NE	37.35	NA	NA	NA	404.78	407.20 - 397.20 (34.93 - 44.93)	0.0	
3Q17		7/5/2017	NE	36.55	NA	NA	NA	405.58		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	
ROST-4-PZ(A)											
2Q17	442.11	4/3/2017	NE	36.80	NA	NA	NA	405.31	407.34 - 397.34 (34.77 - 44.77)	0.0	
3Q17		7/5/2017	NE	35.80	NA	NA	NA	406.31		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	

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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(B)											
2Q17	442.38	4/3/2017	NE	37.43	NA	NA	NA	404.95	407.33 - 397.33 (35.05 - 45.05)	0.0	
3Q17		7/5/2017	NE	36.53	NA	NA	NA	405.85		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	
ROST-4-PZ(C)											
2Q17	442.66	4/3/2017	NE	38.24	NA	NA	NA	404.42	407.71 - 397.71 (34.95 - 44.95)	0.0	
3Q17		7/5/2017	NE	37.23	NA	NA	NA	405.43		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	
ROST-4-PZ(D)											
2Q17	442.98	4/3/2017	NE	38.09	NA	NA	NA	404.89	408.01 - 398.01 (34.97 - 44.97)	0.0	
3Q17		7/5/2017	NE	37.17	NA	NA	NA	405.81		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	
ROST-4-PZ(E)											
2Q17	441.96	4/3/2017	NE	37.28	NA	NA	NA	404.68	407.21 - 397.21 (34.75 - 44.75)	0.0	
3Q17		7/5/2017	NE	36.48	NA	NA	NA	405.48		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	

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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)											
2Q17	442.12	4/3/2017	NE	37.63	NA	NA	NA	404.49	407.59 - 397.59 (34.53 - 44.53)	0.0	
3Q17		7/5/2017	NE	36.67	NA	NA	NA	405.45		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	
ROST-4-PZ(G)											
2Q17	442.13	4/3/2017	NE	37.93	NA	NA	NA	404.20	407.85 - 397.85 (34.28 - 44.28)	0.4	
3Q17		7/5/2017	NE	36.77	NA	NA	NA	405.36		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	
S-1											
2Q17	443.90	4/3/2017	39.35	39.41	404.49	404.55	0.06	404.54	Unknown	356	
3Q17		7/6/2017	39.02	39.08	404.82	404.88	0.06	404.87		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	
T-1											
2Q17	445.40	4/3/2017	NE	40.51	NA	NA	NA	404.89	398.40 - 388.40 (47.00 - 5.007)	0.0	*
3Q17		7/5/2017	NE	39.11	NA	NA	NA	406.29		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	*

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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											
2Q17	443.21	4/3/2017	NE	38.30	NA	NA	NA	404.91	392.72 - 372.56 (50.49 - 70.64)	0.0	*
3Q17		7/5/2017	NE	37.21	NA	NA	NA	406.00		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	*
T-3											
2Q17	449.03	4/3/2017	NE	45.05	NA	NA	NA	403.98	403.81 - 388.81 (45.22 - 60.22)	0.0	*
3Q17		7/6/2017	NE	44.04	NA	NA	NA	404.99		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	
T-4											
2Q17	446.63	4/4/2017	NE	42.98	NA	NA	NA	403.65	398.32 - 383.32 (48.31 - 63.31)	12.4	*
3Q17		7/6/2017	NE	41.92	NA	NA	NA	404.71		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	*
T-5											
2Q17	443.47	4/3/2017	NE	38.36	NA	NA	NA	405.11	395.14 - 378.59 (48.33 - 64.88)	0.0	*
3Q17		7/6/2017	NE	38.07	NA	NA	NA	405.40		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	*

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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
T-6											
2Q17	446.61	4/3/2017	NE	42.71	NA	NA	NA	403.90	394.85 - 380.60 (51.76 - 66.01)	2.3	*
3Q17		7/5/2017	NE	41.60	NA	NA	NA	405.01		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	394.10 - 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	*
T-7											
2Q17	444.04	4/4/2017	NE	38.84	NA	NA	NA	405.20	395.32 - 380.32 (48.72 - 63.72)	0.8	*
3Q17		7/6/2017	NE	37.53	NA	NA	NA	406.51		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	*
T-12											
2Q17	444.80	4/3/2017	NE	40.86	NA	NA	NA	403.94	397.97 - 371.97 (46.83 - 72.83)	0.9	*
3Q17		7/5/2017	NE	40.06	NA	NA	NA	404.74		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	*
T-13											
2Q17	443.96	4/3/2017	NE	38.50	NA	NA	NA	405.46	396.46 - 370.46 (47.50 - 73.50)	0.0	*
3Q17		7/5/2017	NE	37.10	NA	NA	NA	406.86		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	*

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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-15											
2Q17	445.14	4/3/2017	NE	40.08	NA	NA	NA	405.06	397.10 - 371.10 (48.04 - 74.04)	0.0	*
3Q17		7/6/2017	NE	38.98	NA	NA	NA	406.16		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	*
T-17											
2Q17	446.01	4/3/2017	NE	38.42	NA	NA	NA	407.59	401.91 - 375.91 (44.10 - 70.10)	0.0	*
3Q17		7/6/2017	NE	36.63	NA	NA	NA	409.38		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	*
T-19											
2Q17	446.79	4/4/2017	NE	43.04	NA	NA	NA	403.75	396.02 - 370.02 (50.77 - 76.77)	18.5	*
3Q17		7/6/2017	NE	42.15	NA	NA	NA	404.64		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	*
T-21											
2Q17	443.99	4/4/2017	NE	30.65	NA	NA	NA	413.34	412.03 - 386.03 (31.96 - 57.96)	0.0	*
3Q17		7/6/2017	NE	28.80	NA	NA	NA	415.19		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	*

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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-22											
2Q17	442.19	4/4/2017	NE	32.43	NA	NA	NA	409.76	410.64 - 384.94 (31.55 - 57.25)	0.0	
3Q17		7/6/2017	NE	30.35	NA	NA	NA	411.84		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	*
T-23											
2Q17	432.69	4/4/2017	NM	NM	NA	NA	NA	NA	405.46 - 379.46 (27.23 - 53.23)	NM	Unable to locate well due to landscaping
3Q17		7/6/2017	NE	23.15	NA	NA	NA	409.54		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	*
T-24											
2Q17	443.81	4/3/2017	39.41	39.97	403.84	404.40	0.56	404.29	402.31 - 376.66 (41.50 - 67.15)	0.0	*
3Q17		7/5/2017	38.53	38.65	405.16	405.28	0.12	405.26		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	*
T-28											
2Q17	444.43	4/3/2017	NE	38.42	NA	NA	NA	406.01	Unknown	0.0	
3Q17		7/6/2017	NE	36.85	NA	NA	NA	407.58		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	

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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											
2Q17	447.25	4/4/2017	NE	39.15	NA	NA	NA	408.10	398.40 - 378.40 (48.85 - 68.85)	0.5	*
3Q17		7/6/2017	NE	37.34	NA	NA	NA	409.91		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	*
T-38											
2Q17	445.67	4/4/2017	NE	36.49	NA	NA	NA	409.18	396.53 - 376.53 (49.14 - 69.14)	0.0	*
3Q17		7/6/2017	NE	34.15	NA	NA	NA	411.52		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	*
T-62											
2Q17	431.99	4/5/2017	NE	27.25	NA	NA	NA	404.74	412.28 - 382.28 (19.71 - 49.71)	0.0	
3Q17		7/6/2017	NE	24.51	NA	NA	NA	407.48		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	
T-63											
2Q17	431.43	4/5/2017	NE	27.02	NA	NA	NA	404.41	411.45 - 381.45 (19.98 - 49.98)	0.0	
3Q17		7/6/2017	NE	23.88	NA	NA	NA	407.55		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	

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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-64											
2Q17	428.93	4/5/2017	NE	25.13	NA	NA	NA	403.80	409.12 - 379.12 (19.81 - 49.81)	0.0	
3Q17		7/6/2017	NE	21.57	NA	NA	NA	407.36		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	

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 1Q18 and 1Q19.

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							
2Q17	6.85	18.34	1.420	16.81	0.00	-73.0	
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	
MW-02							
2Q17	7.16	18.41	1.294	6.91	0.00	-195.0	
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	
MW-03							
2Q17	6.94	18.74	1.371	1.33	0.09	126.0	
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	

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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							
2Q17	6.87	18.33	1.362	4.35	0.06	4.0	
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	
MW-05							
2Q17	6.86	20.23	1.133	3.63	0.07	-153.0	
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	
MW-06A							
2Q17	6.81	20.33	1.013	3.18	0.02	179.0	
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	

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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							
2Q17	7.16	19.83	0.852	0.78	0.05	174.0	
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	
MW-06C							
2Q17	7.12	18.60	0.983	0.30	0.07	166.0	
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	
MW-06D							
2Q17	7.12	18.95	1.318	16.95	0.04	171.0	
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	

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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							
2Q17	6.68	18.26	1.454	3.28	0.13	38.0	
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	
MW-08							
2Q17	6.69	19.87	1.550	3.88	0.07	30.0	
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	
MW-09							
2Q17	6.79	19.36	1.406	4.02	0.03	-65.0	
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	

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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							
2Q17	6.92	19.40	2.082	47.49	0.00	-76.0	
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	
MW-11							
2Q17	6.77	17.67	1.561	1.19	0.05	-77.0	
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	
MW-12							
2Q17	7.42	20.12	1.564	17.22	0.20	116.0	
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	

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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							
2Q17	6.74	20.84	1.389	2.78	0.00	-92.0	
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	
MW-14							
2Q17	6.82	20.68	1.650	0.00	0.04	-35.0	
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	
MW-16							
2Q17	7.40	20.90	1.785	24.70	0.13	-58.0	
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	

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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							
2Q17	6.91	20.47	1.193	2.48	0.06	-110.0	
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	
MW-23							
2Q17	6.42	17.76	1.260	45.01	0.02	177.0	
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	
MW-24							
2Q17	7.00	18.97	1.611	7.19	0.16	34.0	
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	

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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							
2Q17	6.87	18.58	1.282	0.54	0.01	33.0	
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	
MW-26							
2Q17	6.84	19.89	1.967	5.21	0.11	156.0	
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	
MW-27							
2Q17	6.93	18.70	1.021	1.65	0.79	-12.0	
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	

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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							
2Q17	6.74	17.54	1.659	13.10	0.08	-44.0	
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	
P-114R							
2Q17	6.85	21.22	0.907	32.88	0.00	-113.0	
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	
P-54							
2Q17	6.86	17.13	1.332	9.18	2.51	191.0	
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	

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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-55R							
2Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.
P-56							
2Q17	7.08	20.62	1.645	10.39	0.00	-80.0	
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	
P-57							
2Q17	6.86	22.38	1.480	0.98	0.03	-96.0	
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	

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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-58							
2Q17	6.69	22.16	2.443	4.71	0.04	61.0	
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.
P-59							
2Q17	6.68	24.94	1.394	1.02	0.07	-78.0	
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	
P-66							
2Q17	6.67	22.11	1.185	8.79	0.00	-69.0	
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	

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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-68							
2Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.
P-74							
2Q17	7.85	19.80	1.536	1.89	8.06	35.0	
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	
P-93A							
2Q17	6.84	20.26	1.177	1.56	0.12	83.0	
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	

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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-93B							
2Q17	6.85	17.81	1.171	8.61	4.05	-52.0	Dishchared during reading.
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	
P-93C							
2Q17	6.96	18.36	1.104	0.43	0.00	-49.0	
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	
P-93D							
2Q17	7.09	17.80	1.192	0.77	0.17	-50.0	
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	

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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
ROST-3-MW							
2Q17	6.86	18.77	1.538	0.88	0.00	-299.0	
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	
ROST-4-PZ(C)							
2Q17	7.30	17.89	1.492	4.89	0.09	-134.0	
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	
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	
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	

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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
T-12							
2Q17	6.98	21.85	1.096	4.41	0.12	-98.0	
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	

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.

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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-041717	4/17/2017	48.80 - 58.80	38.58	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-071117	7/11/2017		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	48.80 - 58.80	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
MW-02	MW2-ROX-041717	4/17/2017	49.87 - 59.87	39.69	NE	<0.13	0.0062	<0.005	0.026 J	0.0088	0.0055	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.000031	<0.000021	<0.005	<0.005	<0.005	0.62	<0.005	0.075	<0.13	<0.005	0.053	0.094
	MW2-ROX-071217	7/12/2017		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	49.87 - 59.87	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
MW-03	MW3-ROX-041117	4/11/2017	34.67 - 44.67	26.13	NE	0.023 J	0.0004 J	<0.001	<0.025	<0.001	<0.001	0.00073 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031 UJ	<0.00002 UJ	<0.001	<0.001	<0.001	0.0011	<0.001	0.0098	<0.025	0.0035	<0.001	0.02
	MW3-ROX-071217	7/12/2017		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	34.67 - 44.67	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
MW-04	MW4-ROX-041017	4/10/2017	45.06 - 55.06	37.08	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001
	MW4-ROX-071017	7/10/2017		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	45.06 - 55.06	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																								

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-05	MW5-ROX-041217	4/12/2017	33.97 - 43.97	25.69	NE	<0.025	0.00049 J	<0.001	<0.025	<0.001	<0.001	0.0012	<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
	MW5-ROX-071217	7/12/2017		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	33.97 - 43.97	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
MW-06A	MW6A-ROX-041217	4/12/2017	34.83 - 44.83	27.69	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0018	<0.001	<0.001
	MW6A-ROX-071117	7/11/2017		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	33.85 - 43.85	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
MW-06B	MW6B-ROX-041217	4/12/2017	64.05 - 69.05	27.75	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-071117	7/11/2017		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	64.05 - 69.05	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																								
MW-06C	MW6C-ROX-041217	4/12/2017	84.95 - 89.95	27.56	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-071117	7/11/2017		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	84.95 - 89.95	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

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-06D	MW6D-ROX-041217	4/12/2017	104.72 - 109.72	27.43	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	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-041217-DUP	4/12/2017		27.43	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-071117	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	<0.000033	<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	104.72 - 109.72	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
MW-07	MW7-ROX-041017	4/10/2017	42.92 - 52.92	38.92	NE	<25	1000	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	0.00012 p J	0.000042 J	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<25	1100	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	0.00012 p J	0.000052 J	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW7 ROX-071117	7/11/2017		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	42.92 - 52.92	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-PCP	1/6/2020		37.60	NE																								
	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																								
MW-08	MW8-ROX-041017	4/10/2017	33.60 - 43.60	30.02	NE	<25	830	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000031 UJ	<0.000021 UJ	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW8-ROX-071017	7/10/2017		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	33.60 - 43.60	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																								

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-09	MW9-ROX-041417	4/14/2017	46.45 - 56.45	40.67	NE	<0.025	0.00068 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
	MW9-ROX-071217	7/12/2017		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	46.04 - 56.04	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
MW-10	MW10-ROX-041417	4/14/2017	44.43 - 54.43	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-071117	7/11/2017		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	44.43 - 54.43	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
MW-11	MW11-ROX-041417	4/14/2017	41.66 - 51.66	38.17	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-071017	7/10/2017		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	41.66 - 51.66	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
MW-12	MW12-ROX-041417	4/14/2017	41.92 - 51.92	38.50	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW-12-ROX-07072017	7/7/2017		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	41.92 - 51.92	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

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-13	MW13-ROX-041317	4/13/2017	25.57 - 35.57	25.75	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0055	<0.001	<0.001
	MW13-ROX-070717	7/7/2017		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	24.80 - 34.80	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
MW-14	MW14-ROX-041317	4/13/2017	33.42 - 43.42	29.54	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
	MW14-ROX-070717	7/7/2017		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	33.42 - 43.42	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																								
MW-16	MW16-ROX-041417	4/14/2017	37.06 - 47.06	39.45	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-071017	7/10/2017		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	37.50 - 47.50	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
MW-22	MW22-ROX-041717	4/17/2017	37.88 - 47.88	38.24	NE	<0.25	0.13	<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	0.89	<0.01	0.032	<0.25	<0.01	0.099	0.057
	MW22-ROX-041717-DUP	4/17/2017		38.24	NE	<0.25	0.14	<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	0.98	<0.01	0.034	<0.25	<0.01	0.11	0.062
	MW22-ROX-071217	7/12/2017		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	38.43 - 48.43	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																								

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-23	MW23-ROX-041117	4/11/2017	29.02 - 39.02	27.54	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
	MW23-ROX-071017	7/10/2017		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	29.02 - 39.02	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																								
MW-24	MW24-ROX-041717	4/17/2017	38.89 - 48.89	39.42	NE	0.13	<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-070717	7/7/2017		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	39.61 - 49.61	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																								
MW-25	MW25-ROX-041117	4/11/2017	35.59 - 45.59	34.31	NE	<0.025	0.19	<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	0.023	<0.001	<0.001
	MW25-ROX-071017	7/10/2017		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	35.59 - 45.59	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
MW-26	MW26-ROX-041417	4/14/2017	38.15 - 48.15	36.91	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-070717	7/7/2017		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	38.15 - 48.15	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

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-27	MW27-ROX-041417	4/14/2017	39.79 - 49.79	38.72	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-071017	7/10/2017		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	39.79 - 49.79	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
MW-28	MW28-ROX-041717	4/17/2017	33.61 - 43.61	38.05	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	0.004	<0.001	0.0041	<0.025	0.00098 J	<0.001	<0.001
	MW28-ROX-071217	7/12/2017		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	33.61 - 43.61	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
P-54	P54-ROX-041717	4/17/2017	38.00 - 63.00	38.30	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	<0.001	<0.001	<0.001
	P54-ROX-071017	7/10/2017		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	38.00 - 63.00	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																								
P-56	P56-ROX-040617	4/6/2017	40.82 - 65.82	42.46	NE	<0.025	0.012	<0.001	0.0097 J	<0.001	0.0022	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.000031 UJ	<0.00002 UJ	<0.001	<0.001	<0.001	0.017	<0.001	0.028	<0.025	<0.001	0.0065	0.032
	P56-ROX-071217	7/12/2017		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	40.82 - 65.82	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

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-57	P57-ROX-040717	4/7/2017	44.19 - 54.19	43.05	NE	<5	45	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.00003 UJ	<0.00002 UJ	<0.2	<0.2	<0.2	0.14 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P57-ROX-071317	7/13/2017		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	44.19 - 54.19	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
P-58	P58-ROX-041117	4/11/2017	40.21 - 65.21	40.74	NE	<13	320	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000031 UJ	<0.000021 UJ	<0.5	<0.5	<0.5	0.48 J	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	P58-ROX-071317	7/13/2017		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-040717	4/7/2017	47.91 - 72.91	43.31	NE	<1.3	7.6	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.000031 UJ	<0.000021 UJ	<0.05	<0.05	<0.05	2	<0.05	0.048 J	<1.3	<0.05	0.18	0.089
	P59-ROX-071317	7/13/2017		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	47.91 - 72.91	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
P-66	P66-ROX-041317	4/13/2017	34.72 - 59.72	32.19	NE	0.012 J	0.00094 J	<0.001	<0.025	0.0054	0.01	0.0028	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031 UJ	<0.00002 UJ	<0.001	<0.001	<0.001	0.00056 J	<0.001	0.082	<0.025	<0.001	0.0018	0.085
	P66-ROX-071217	7/12/2017		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	34.72 - 59.72	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

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-74	P74-ROX-040717	4/7/2017	44.43 - 69.43	38.92	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	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-071217	7/12/2017		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	43.83 - 68.83	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
P-93A	P93A-ROX-040717	4/7/2017	43.07 - 53.07	41.26	NE	<0.05	0.72	<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	<0.002	<0.002	<0.002	<0.05	<0.002	<0.002	<0.002
	P93A-ROX-040717-DUP	4/7/2017		41.26	NE	<0.05	0.68	<0.002	<0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000031	<0.000021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05	<0.002	<0.002	<0.002
	P93A-ROX-071317	7/13/2017		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	43.07 - 53.07	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
P-93B	P93B-ROX-040617	4/6/2017	74.60 - 76.60	42.59	NE	<13	79	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.00003 UJ	<0.00002 UJ	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	P93B-ROX-071117	7/11/2017		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	74.78 - 76.78	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

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-93C	P93C-ROX-040517	4/5/2017	92.47 - 97.47	42.19	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	0.0043	<0.001	<0.001
	P93C-ROX-071217	7/12/2017		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	92.88 - 97.88	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
P-93D	P93D-ROX-040617	4/6/2017	125.75 - 127.75	42.80	NE	<0.025	0.07	<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	0.002	<0.001	<0.001
	P93D-ROX-071117	7/11/2017		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	125.75 - 127.75	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
P-114R	P114R-ROX-041317	4/13/2017	23.01 - 33.01	25.05	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	0.00085 J	<0.001	<0.001
	P114R-ROX-071117	7/11/2017		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	<0.000021	<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	23.01 - 33.01	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	<0.000023	<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																								
ROST-3-MW	ROST3MW-ROX-041417	4/14/2017	37.81 - 47.81	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-071117	7/11/2017		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	37.81 - 47.81	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

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-4-PZ(C)	ROST4PZC-ROX-041717	4/17/2017	34.95 - 44.95	38.24	NE	<0.05	0.025	<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	0.088	<0.002	0.0073	<0.05	<0.002	0.12	0.012
	ROST4PZC-ROX-071217	7/12/2017		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	34.95 - 44.95	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
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	0.00071 J	<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	34.75 - 44.75	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
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	34.28 - 44.28	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
T-12	T12-ROX-040617	4/6/2017	46.83 - 72.83	41.18	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 UJ	<0.00002 UJ	<0.01	<0.01	<0.01	0.02	<0.01	0.0072 J	<0.25	0.029	0.016	0.012
	T12-ROX-071317	7/13/2017		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	<0.00028	<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	46.83 - 72.83	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

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-041717	4/17/2017	48.80 - 58.80	38.58	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-071117	7/11/2017		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	48.80 - 58.80	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
MW-02	MW2-ROX-041717	4/17/2017	49.87 - 59.87	39.69	NE	<0.005	<0.005	0.012	0.12	0.088	<0.005	0.35	0.028	0.38	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0035 U	<0.01	<0.01	<0.00021
	MW2-ROX-071217	7/12/2017		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	49.87 - 59.87	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
MW-03	MW3-ROX-041117	4/11/2017	34.67 - 44.67	26.13	NE	<0.001	<0.001	0.019	<0.001	<0.001	<0.001	0.086	0.0053	0.091	<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
	MW3-ROX-071217	7/12/2017		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	34.67 - 44.67	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
MW-04	MW4-ROX-041017	4/10/2017	45.06 - 55.06	37.08	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	0.000047 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW4-ROX-071017	7/10/2017		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	<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	45.06 - 55.06	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																							

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-05	MW5-ROX-041217	4/12/2017	33.97 - 43.97	25.69	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
	MW5-ROX-071217	7/12/2017		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	<0.00096	<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	33.97 - 43.97	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
MW-06A	MW6A-ROX-041217	4/12/2017	34.83 - 44.83	27.69	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-071117	7/11/2017		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	33.85 - 43.85	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
MW-06B	MW6B-ROX-041217	4/12/2017	64.05 - 69.05	27.75	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	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW6B-ROX-071117	7/11/2017		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	64.05 - 69.05	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																							
MW-06C	MW6C-ROX-041217	4/12/2017	84.95 - 89.95	27.56	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	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW6C-ROX-071117	7/11/2017		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	84.95 - 89.95	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

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-06D	MW6D-ROX-041217	4/12/2017	104.72 - 109.72	27.43	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-041217-DUP	4/12/2017		27.43	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
	MW6D-ROX-071117	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	0.00016 J	<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	104.72 - 109.72	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
MW-07	MW7-ROX-041017	4/10/2017	42.92 - 52.92	38.92	NE	<1	<1	0.8 J	<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 *	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<1	<1	0.85 J	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.016 J *	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW7 ROX-071117	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	<0.0097	<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	42.92 - 52.92	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-PCP	1/6/2020		37.60	NE																							
	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																							
MW-08	MW8-ROX-041017	4/10/2017	33.60 - 43.60	30.02	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-071017	7/10/2017		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	33.60 - 43.60	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																							

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-09	MW9-ROX-041417	4/14/2017	46.45 - 56.45	40.67	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	<0.0096	<0.0096	<0.00019
	MW9-ROX-071217	7/12/2017		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 UJ	<0.00019	<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	46.04 - 56.04	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 UJ	<0.00019	<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 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
MW-10	MW10-ROX-041417	4/14/2017	44.43 - 54.43	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	<0.00019	<0.029	<0.0095	0.0025 J	<0.0095	<0.0095	<0.00019
	MW10-ROX-071117	7/11/2017		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	44.43 - 54.43	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
MW-11	MW11-ROX-041417	4/14/2017	41.66 - 51.66	38.17	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	<0.028	<0.0095	0.0027 J	<0.0095	<0.0095	<0.00019
	MW11-ROX-071017	7/10/2017		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	41.66 - 51.66	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
MW-12	MW12-ROX-041417	4/14/2017	41.92 - 51.92	38.50	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	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW-12-ROX-07072017	7/7/2017		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	41.92 - 51.92	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

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-13	MW13-ROX-041317	4/13/2017	25.57 - 35.57	25.75	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03	<0.01	<0.01	<0.01	<0.01	<0.001
	MW13-ROX-070717	7/7/2017		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	24.80 - 34.80	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
MW-14	MW14-ROX-041317	4/13/2017	33.42 - 43.42	29.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000025 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	0.0022 J	<0.0099	<0.0099	<0.0002
	MW14-ROX-070717	7/7/2017		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	33.42 - 43.42	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																							
MW-16	MW16-ROX-041417	4/14/2017	37.06 - 47.06	39.45	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	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW16-ROX-071017	7/10/2017		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	37.50 - 47.50	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
MW-22	MW22-ROX-041717	4/17/2017	37.88 - 47.88	38.24	NE	<0.01	<0.01	0.077	0.36	0.085	<0.01	1.7	0.71	2.4	<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-041717-DUP	4/17/2017		38.24	NE	<0.01	<0.01	0.084	0.39	0.094	<0.01	1.8	0.77	2.6	<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
	MW22-ROX-071217	7/12/2017		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	0.0042	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	<0.00019	<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	0.0037	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	<0.00019	<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	38.43 - 48.43	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																							

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-23	MW23-ROX-041117	4/11/2017	29.02 - 39.02	27.54	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
	MW23-ROX-071017	7/10/2017		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	0.000025 J	<0.00019	<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	29.02 - 39.02	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																							
MW-24	MW24-ROX-041717	4/17/2017	38.89 - 48.89	39.42	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	<0.0099	<0.0099	<0.0099	<0.0002
	MW24-ROX-070717	7/7/2017		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	39.61 - 49.61	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																							
MW-25	MW25-ROX-041117	4/11/2017	35.59 - 45.59	34.31	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	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW25-ROX-071017	7/10/2017		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	35.59 - 45.59	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
MW-26	MW26-ROX-041417	4/14/2017	38.15 - 48.15	36.91	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
	MW26-ROX-070717	7/7/2017		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	<0.0095	<0.003 H UJ	<0.0095	<0.0095	<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	0.000043 J	0.00004 J	<0.0002	<0.0002	0.000045 J	<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	38.15 - 48.15	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

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-27	MW27-ROX-041417	4/14/2017	39.79 - 49.79	38.72	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	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW27-ROX-071017	7/10/2017		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 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	39.79 - 49.79	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
MW-28	MW28-ROX-041717	4/17/2017	33.61 - 43.61	38.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0054	0.0063 J	<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
	MW28-ROX-071217	7/12/2017		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	<0.0002 UJ	<0.0002 UJ	<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	33.61 - 43.61	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
P-54	P54-ROX-041717	4/17/2017	38.00 - 63.00	38.30	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	<0.01	<0.0027 U	<0.01	<0.01	<0.0002
	P54-ROX-071017	7/10/2017		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	38.00 - 63.00	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																						
P-56	P56-ROX-040617	4/6/2017	40.82 - 65.82	42.46	NE	<0.001	<0.001	0.0041	0.038	0.011	<0.001	0.079	0.0018 J	0.08	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.0027 J * J	<0.01	<0.01	<0.0002
	P56-ROX-071217	7/12/2017		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	<0.00019	<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	40.82 - 65.82	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

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-57	P57-ROX-040717	4/7/2017	44.19 - 54.19	43.05	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00025 J	<0.001	<0.001	0.00023 J	<0.001	<0.001	<0.001	<0.001	<0.029 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.001
	P57-ROX-071317	7/13/2017		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	44.19 - 54.19	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
P-58	P58-ROX-041117	4/11/2017	40.21 - 65.21	40.74	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	0.00063 J	0.00017 J	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	0.00027 J
	P58-ROX-071317	7/13/2017		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	<0.00039 H UJ	<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	<0.00099	0.00055 J	0.00049 J	<0.00099	<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-040717	4/7/2017	47.91 - 72.91	43.31	NE	<0.05	<0.05	0.59	0.55	0.13	<0.05	3.3	0.12 J	3.4	0.00017 J	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.029 H UJ	<0.0097 H UJ	0.0063 J H J	<0.0097 H UJ	<0.0097 H UJ	<0.00095
	P59-ROX-071317	7/13/2017		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	47.91 - 72.91	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
P-66	P66-ROX-041317	4/13/2017	34.72 - 59.72	32.19	NE	<0.001	<0.001	0.0011	0.0014	<0.001	<0.001	<0.005	0.00081 J	<0.01	0.00041	0.00014 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P66-ROX-071217	7/12/2017		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	34.72 - 59.72	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

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-74	P74-ROX-040717	4/7/2017	44.43 - 69.43	38.92	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	<0.031 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.00022
	P74-ROX-071217	7/12/2017		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-010820	1/8/2020	43.83 - 68.83	38.40	NE	<0.001	<0.001	0.0005 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	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
P-93A	P93A-ROX-040717	4/7/2017	43.07 - 53.07	41.26	NE	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.02	<0.00019	<0.00019	<0.00019	0.00014 J	0.00012 J	0.00015 J	0.0002	0.00015 J	<0.029 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	0.00013 J
	P93A-ROX-040717-DUP	4/7/2017		41.26	NE	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.02	<0.00021	<0.00021	<0.00021	0.000044 J	<0.00021	0.000053 J	<0.00021	<0.00021	<0.032 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.00021
	P93A-ROX-071317	7/13/2017		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	43.07 - 53.07	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
P-93B	P93B-ROX-040617	4/6/2017	74.60 - 76.60	42.59	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	0.0044 J * J	<0.0095	<0.0095	<0.00019
	P93B-ROX-071117	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	<0.0095	<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	74.78 - 76.78	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

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-93C	P93C-ROX-040517	4/5/2017	92.47 - 97.47	42.19	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
	P93C-ROX-071217	7/12/2017		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	92.88 - 97.88	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
P-93D	P93D-ROX-040617	4/6/2017	125.75 - 127.75	42.80	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
	P93D-ROX-071117	7/11/2017		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	125.75 - 127.75	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
P-114R	P114R-ROX-041317	4/13/2017	23.01 - 33.01	25.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000062 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.0042 J	<0.01	<0.01	<0.0002
	P114R-ROX-071117	7/11/2017		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	0.000055 J	<0.00039	<0.0002	<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	23.01 - 33.01	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																							
ROST-3-MW	ROST3MW-ROX-041417	4/14/2017	37.81 - 47.81	38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00027	0.000039 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
	ROST3MW-ROX-071117	7/11/2017		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	37.81 - 47.81	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

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-4-PZ(C)	ROST4PZC-ROX-041717	4/17/2017	34.95 - 44.95	38.24	NE	<0.002	<0.002	0.028	0.074	0.013	<0.002	0.3	0.007 J	0.31	0.0012	0.00016 J	0.00017 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	ROST4PZC-ROX-071217	7/12/2017		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	34.95 - 44.95	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
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	34.75 - 44.75	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
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	34.28 - 44.28	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
T-12	T12-ROX-040617	4/6/2017	46.83 - 72.83	41.18	NE	<0.01	<0.01	0.032	0.015	<0.01	<0.01	0.066	<0.05	0.069 J	<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
	T12-ROX-071317	7/13/2017		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	46.83 - 72.83	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	<0.0096	<0.0096	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	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-041717	4/17/2017	48.80 - 58.80	38.58	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
	MW1-ROX-071117	7/11/2017		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	48.80 - 58.80	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
MW-02	MW2-ROX-041717	4/17/2017	49.87 - 59.87	39.69	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	0.012	0.02	<0.01	<0.021	<0.01	<0.01	0.0019 J	<0.00021	<0.01	<0.00021	<0.01
	MW2-ROX-071217	7/12/2017		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	49.87 - 59.87	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
MW-03	MW3-ROX-041117	4/11/2017	34.67 - 44.67	26.13	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	0.00097	0.00057	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW3-ROX-071217	7/12/2017		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	34.67 - 44.67	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
MW-04	MW4-ROX-041017	4/10/2017	45.06 - 55.06	37.08	NE	0.000051 J	<0.01	<0.01	<0.01	<0.01	<0.01	0.0014 J	0.000036 J	<0.0002	<0.01	0.000041 J	<0.01	0.000088 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000038 J	<0.01
	MW4-ROX-071017	7/10/2017		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	<0.00063 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	<0.019	<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	<0.001 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	0.0013 J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	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	45.06 - 55.06	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				

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-05	MW5-ROX-041217	4/12/2017	33.97 - 43.97	25.69	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
	MW5-ROX-071217	7/12/2017		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	33.97 - 43.97	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
MW-06A	MW6A-ROX-041217	4/12/2017	34.83 - 44.83	27.69	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
	MW6A-ROX-071117	7/11/2017		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	33.85 - 43.85	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
MW-06B	MW6B-ROX-041217	4/12/2017	64.05 - 69.05	27.75	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
	MW6B-ROX-071117	7/11/2017		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	<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	64.05 - 69.05	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				
MW-06C	MW6C-ROX-041217	4/12/2017	84.95 - 89.95	27.56	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
	MW6C-ROX-071117	7/11/2017		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	<0.00059 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	84.95 - 89.95	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

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-06D	MW6D-ROX-041217	4/12/2017	104.72 - 109.72	27.43	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-041217-DUP	4/12/2017		27.43	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
	MW6D-ROX-071117	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	0.000051 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	104.72 - 109.72	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
MW-07	MW7-ROX-041017	4/10/2017	42.92 - 52.92	38.92	NE	<0.00019	<0.0097	<0.0097	0.0051 J	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	0.0024 J	0.00004 J	<0.0097	0.0019	0.0027	0.0043 J	0.0056 J	<0.0097	<0.0097	<0.019	<0.00019	0.27	<0.00019	<0.0097
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<0.00019	<0.0097	<0.0097	0.005 J	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	0.0022 J	0.000039 J	<0.0097	0.0019	0.0027	0.0045 J	0.0059 J	<0.0097	<0.0097	<0.019	<0.00019	0.31	<0.00019	<0.0097
	MW7 ROX-071117	7/11/2017		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	<0.00019	0.00013 J	0.0019 J	<0.00019	<0.0095	0.0027	0.0038	0.0031 J	<0.019	<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	42.92 - 52.92	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	42.92 - 52.92	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-PCP	1/6/2020		37.60	NE																			<0.019				
	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				
MW-08	MW8-ROX-041017	4/10/2017	33.60 - 43.60	30.02	NE	<0.0002	<0.01	<0.01	0.0061 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0017 J	<0.0002	<0.01	0.0087	0.0036	<0.01	0.0014 J	<0.01	<0.01	0.0021 J	<0.0002	0.22	<0.0002	<0.01
	MW8-ROX-071017	7/10/2017		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	<0.0006 U	<0.0095	<0.00019	0.00024	<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	33.60 - 43.60	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				

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-09	MW9-ROX-041417	4/14/2017	46.45 - 56.45	40.67	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	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW9-ROX-071217	7/12/2017		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	46.04 - 56.04	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
MW-10	MW10-ROX-041417	4/14/2017	44.43 - 54.43	40.50	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	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-071117	7/11/2017		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	44.43 - 54.43	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
MW-11	MW11-ROX-041417	4/14/2017	41.66 - 51.66	38.17	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00051 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00004 J	0.000057 J J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW11-ROX-071017	7/10/2017		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	41.66 - 51.66	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
MW-12	MW12-ROX-041417	4/14/2017	41.92 - 51.92	38.50	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000021 J	<0.0002	<0.01	<0.0002	<0.01	0.000025 J	0.000036 J J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW-12-ROX-07072017	7/7/2017		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 UJ	<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
	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	41.92 - 51.92	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

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-13	MW13-ROX-041317	4/13/2017	25.57 - 35.57	25.75	NE	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.001	<0.01	<0.02	<0.01	<0.01	<0.02	<0.001	<0.01	<0.001	<0.01
	MW13-ROX-070717	7/7/2017		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	24.80 - 34.80	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
MW-14	MW14-ROX-041317	4/13/2017	33.42 - 43.42	29.54	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	0.000026 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW14-ROX-070717	7/7/2017		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	33.42 - 43.42	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				
MW-16	MW16-ROX-041417	4/14/2017	37.06 - 47.06	39.45	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-071017	7/10/2017		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	37.50 - 47.50	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
MW-22	MW22-ROX-041717	4/17/2017	37.88 - 47.88	38.24	NE	<0.00019	<0.0095	<0.0095	0.0046 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0084 J	<0.00019	<0.0095	0.0072	0.011 J	<0.0095	0.0025 J	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW22-ROX-041717-DUP	4/17/2017		38.24	NE	<0.00019	<0.0096	<0.0096	0.0053 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.01	<0.00019	<0.0096	0.0091	0.015 J	<0.0096	0.0023 J	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW22-ROX-071217	7/12/2017		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	0.014	<0.011	<0.011	<0.011	<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	38.43 - 48.43	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				

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-23	MW23-ROX-041117	4/11/2017	29.02 - 39.02	27.54	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	0.000049 J	0.000049 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW23-ROX-071017	7/10/2017		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	29.02 - 39.02	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				
MW-24	MW24-ROX-041717	4/17/2017	38.89 - 48.89	39.42	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	0.00003 J	0.000048 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW24-ROX-070717	7/7/2017		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	39.61 - 49.61	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				
MW-25	MW25-ROX-041117	4/11/2017	35.59 - 45.59	34.31	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	0.00024	0.000033 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.0042 J	<0.00019	<0.0095
	MW25-ROX-071017	7/10/2017		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	<0.0095	0.00092 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	<0.00019	<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	35.59 - 45.59	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
MW-26	MW26-ROX-041417	4/14/2017	38.15 - 48.15	36.91	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
	MW26-ROX-070717	7/7/2017		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	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J	0.00003 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	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	<0.00022 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	<0.000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000096	<0.000096	<0.0095	<0.000096	<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	<0.000096	<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	38.15 - 48.15	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

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-27	MW27-ROX-041417	4/14/2017	39.79 - 49.79	38.72	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	0.000025 J	0.000032 J J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-071017	7/10/2017		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	39.79 - 49.79	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
MW-28	MW28-ROX-041717	4/17/2017	33.61 - 43.61	38.05	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	0.00016 J	0.000092 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW28-ROX-071217	7/12/2017		36.48	NE	<0.0004	<0.0099	<0.0099	<0.0099	<0.0099	0.00049 J	<0.0099	<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	0.000038 J	0.000026 J	<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	33.61 - 43.61	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
P-54	P54-ROX-041717	4/17/2017	38.00 - 63.00	38.30	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
	P54-ROX-071017	7/10/2017		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	0.000022 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	38.00 - 63.00	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				
P-56	P56-ROX-040617	4/6/2017	40.82 - 65.82	42.46	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.01	<0.0002	0.000095 J	<0.01	<0.0002	<0.01	0.0037	0.001	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	P56-ROX-071217	7/12/2017		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	0.0012 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	40.82 - 65.82	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

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)**																				
P-57	P57-ROX-040717	4/7/2017	44.19 - 54.19	43.05	NE	<0.001	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.001	0.00038 J J	0.001 J H J	<0.001	<0.0097 H UJ	0.019	0.025	<0.0097 H UJ	<0.019 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.019 H UJ	0.0002 J	0.95 H J	<0.001	<0.0097 H UJ
	P57-ROX-071317	7/13/2017		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	44.19 - 54.19	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
P-58	P58-ROX-041117	4/11/2017	40.21 - 65.21	40.74	NE	<0.00095	0.0013 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	0.0012	<0.0095	<0.00095	<0.0095	0.051	0.053	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0011	0.15	0.00027 J	<0.0095
	P58-ROX-071317	7/13/2017		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-040717	4/7/2017	47.91 - 72.91	43.31	NE	<0.00095	<0.0097 H UJ	<0.0097 H UJ	0.012 H J	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	0.00012 J	0.00023 J	0.016 H J	<0.00095	<0.0097 H UJ	0.018	0.028	<0.0097 H UJ	0.0034 J H J	<0.0097 H UJ	<0.0097 H UJ	<0.019 H UJ	0.00043 J	0.047 H J	<0.00095	<0.0097 H UJ
	P59-ROX-071317	7/13/2017		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	47.91 - 72.91	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
P-66	P66-ROX-041317	4/13/2017	34.72 - 59.72	32.19	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00053	0.001 J	<0.0002	<0.0098	0.022	0.0058	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0001 J	<0.0098	0.000058 J	<0.0098
	P66-ROX-071217	7/12/2017		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

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)**																				
P-74	P74-ROX-040717	4/7/2017	44.43 - 69.43	38.92	NE	<0.00022	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.00022	<0.00022	<0.01 H UJ	<0.00022	<0.01 H UJ	<0.00022	<0.00022	<0.01 H UJ	<0.021 H UJ	<0.01 H UJ	<0.01 H UJ	<0.021 H UJ	<0.00022	<0.01 H UJ	<0.00022	<0.01 H UJ
	P74-ROX-071217	7/12/2017		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	43.83 - 68.83	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
P-93A	P93A-ROX-040717	4/7/2017	43.07 - 53.07	41.26	NE	0.00019	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	0.000045 J	<0.00019	<0.0095 H UJ	0.0002	<0.0095 H UJ	<0.00019	<0.00019	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.00019	0.0077 J H J	0.000035 J	<0.0095 H UJ
	P93A-ROX-040717-DUP	4/7/2017		41.26	NE	<0.00021	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.00021	<0.00021	<0.011 H UJ	0.000046 J	<0.011 H UJ	<0.00021	<0.00021	<0.011 H UJ	<0.021 H UJ	<0.011 H UJ	<0.011 H UJ	<0.021 H UJ	<0.00021	0.01 J H J	<0.00021	<0.011 H UJ
	P93A-ROX-071317	7/13/2017		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	<0.00019	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	43.07 - 53.07	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
P-93B	P93B-ROX-040617	4/6/2017	74.60 - 76.60	42.59	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	<0.019	<0.00019	0.14	<0.00019	<0.0095
	P93B-ROX-071117	7/11/2017		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	<0.0099	<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	74.78 - 76.78	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

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)**																					
P-93C	P93C-ROX-040517	4/5/2017	92.47 - 97.47	42.19	NE	0.000048 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	0.000051 J	<0.0095	0.000033 J	0.000037 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P93C-ROX-071217	7/12/2017		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	92.88 - 97.88	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
P-93D	P93D-ROX-040617	4/6/2017	125.75 - 127.75	42.80	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
	P93D-ROX-071117	7/11/2017		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	125.75 - 127.75	41.68	NE	<0.00019	<0.0096	<0.0096	<0.0096 UJ	<0.0096	<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
P-114R	P114R-ROX-041317	4/13/2017	23.01 - 33.01	25.05	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0001 J	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.00011 J	<0.01	<0.0002	<0.01
	P114R-ROX-071117	7/11/2017		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	23.01 - 33.01	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				
ROST-3-MW	ROST3MW-ROX-041417	4/14/2017	37.81 - 47.81	38.16	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00064 U	<0.0095	<0.00019	0.000065 J	<0.0095	<0.00019	<0.0095	0.0025	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000085 J	<0.0095	<0.00019	<0.0095
	ROST3MW-ROX-071117	7/11/2017		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	37.81 - 47.81	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

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)**																				
ROST-4-PZ(C)	ROST4PZC-ROX-041717	4/17/2017	34.95 - 44.95	38.24	NE	<0.00019	<0.0097	0.00075 J	<0.0097	<0.0097	<0.0097	<0.0097	0.000022 J	0.00066	<0.0097	<0.00019	<0.0097	0.026	0.016	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00045	<0.0097	0.000043 J	<0.0097
	ROST4PZC-ROX-071217	7/12/2017		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	0.00003 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	0.000024 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	<0.000066 U	0.0013	<0.0095 UJ	<0.00019	<0.0095	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	34.95 - 44.95	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
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	<0.0002	<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	34.75 - 44.75	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
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	34.28 - 44.28	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
T-12	T12-ROX-040617	4/6/2017	46.83 - 72.83	41.18	NE	<0.00019	<0.0096	<0.0096	<0.0096	0.0038 J	<0.0096 UJ	<0.0096	<0.00019	<0.00019	0.0044 J	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.021	<0.00019	<0.0096
	T12-ROX-071317	7/13/2017		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	0.003 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	46.83 - 72.83	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

Notes:

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

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

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

Groundwater monitoring wells designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-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 1Q18 and 1Q19.

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 possible lab contamination.

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

H = Analyzed or extracted out of holding time criteria.

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

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:

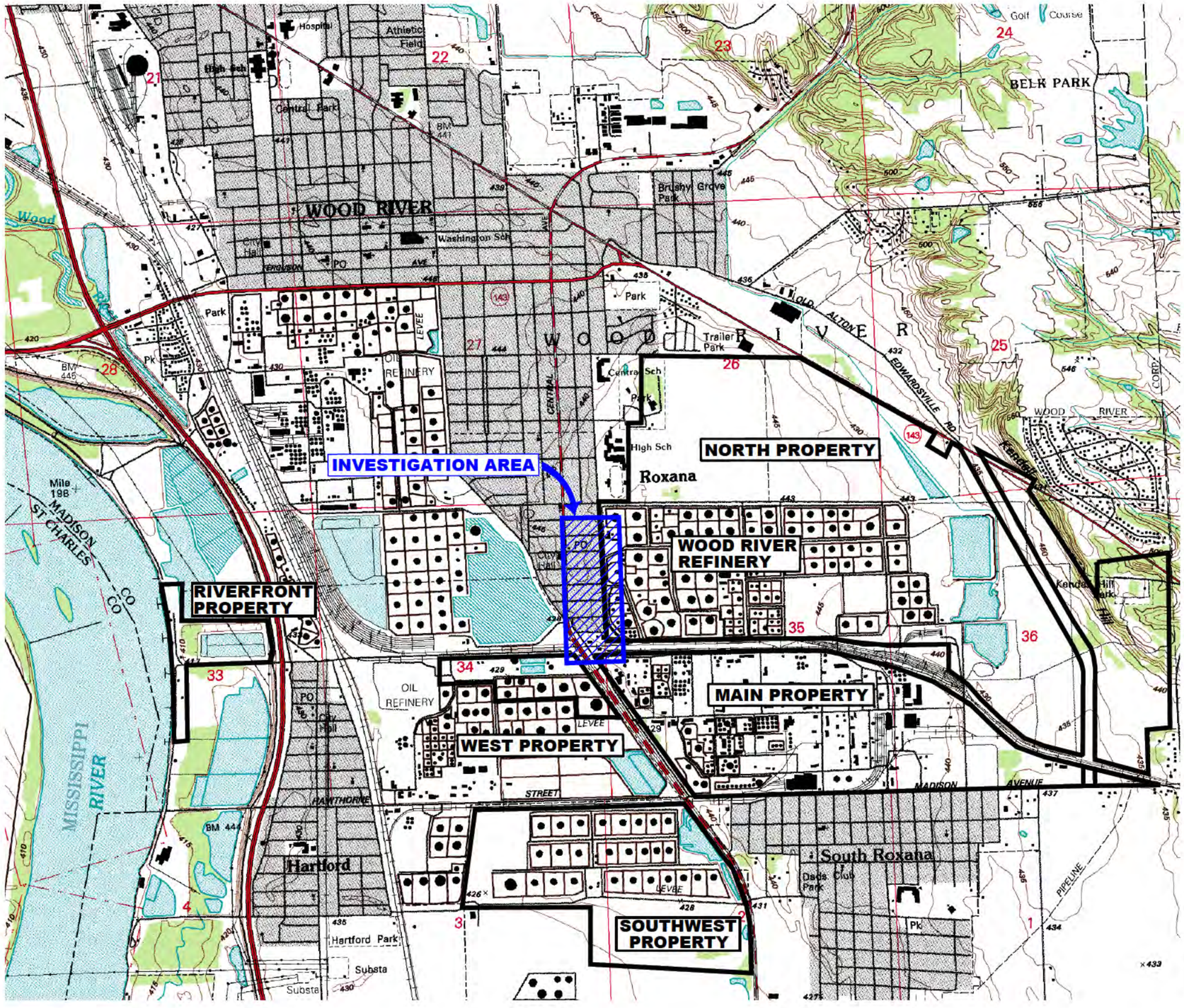
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

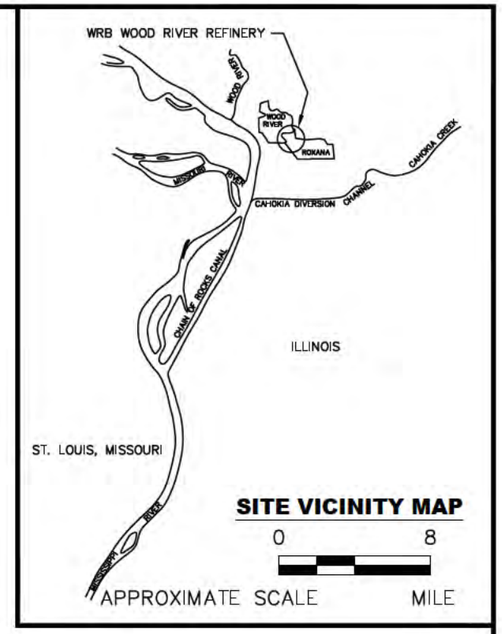
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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 April 2020
DSGN. BY: wmp
CHKD. BY: b3

Investigation Area Location Map

FIG. NO. 1

File: G:\GIS\PROJECTS\OIS_AMERICAS\SHELL\ILLINOIS\USP00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA_2019_GW_RPT\02_WORKSPACE\FIGURE 1 INVESTIGATION AREA LOCATION_MAP.DWG Last edited: 12/19/19 @ 11:08 AM @ WCC-ST LOUIS

File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q19 GW RPT\02. WORKSPACE\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Nov. 13, 19 @ 1:41 PM by: popoo

LEGEND

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

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

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

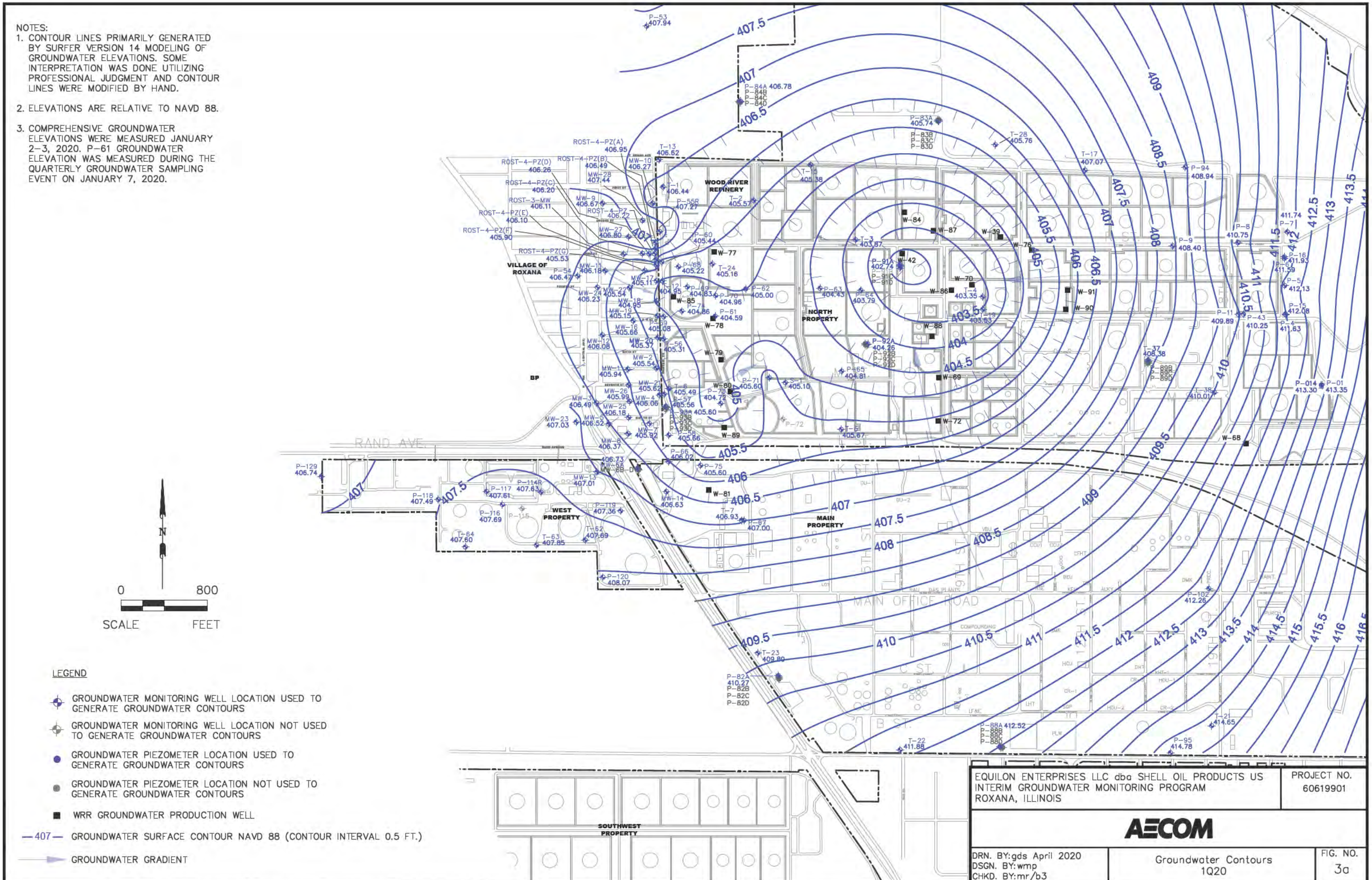
0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60619901
AECOM		
DRN. BY:gds April 2020 DSGN. BY:gds CHKD. BY:mr/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 JANUARY 2–3, 2020. P–61 GROUNDWATER ELEVATION WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON JANUARY 7, 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

AECOM

DRN. BY:gds April 2020
DSGN. BY:wmp
CHKD. BY:mr/b3

Groundwater Contours
1Q20

FIG. NO. 3a

File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q20 GW RPT\WORKSPACE\FIGURE 3A ROXANA 1Q20 CONTOUR MAP (800 SCALE).DWG Last edited: Feb. 5, 20 @ 1:25 PM by: popaa

File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q20 GW RPT\WORKSPACE\FIGURE 3B ROXANNA 4Q19 CONTOUR MAP1.DWG Last edited: Feb. 05, 20 @ 1:06 PM by: popaa

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 JANUARY 2–3, 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
VILLAGE OF ROXANA
NORTH PROPERTY
WOOD RIVER REFINERY
MAIN PROPERTY
WEST PROPERTY
BP
PUBLIC WORKS YARD
1986 APPROXIMATE BENZENE RELEASE SITE

I-13 406.82
T-1 406.44
T-2 405.57
MW-9 406.67
MW-10 406.27
MW-28 407.44
ROST-4-PZ(A) 406.95
ROST-4-PZ 406.22
P-55R 407.27
ROST-4-PZ(B) 406.49
MW-27 406.80
ROST-4-PZ(D) 406.26
ROST-4-PZ(C) 406.20
ROST-3-MW 406.11
ROST-4-PZ(E) 406.10
W-77
A-28
P-60 405.44
P-68 405.22
T-24 405.16
ROST-4-PZ(G) 405.53
ROST-4-PZ(F) 405.90
MW-11 406.18
P-54 406.47
MW-17 405.11
T-12 404.95
P-69 404.83
P-62 405.00
MW-24 406.23
MW-22 405.54
A-27
W-85
P-70 404.96
MW-18 404.95
P-74 404.86
P-61 404.59
W-78
MW-19 405.19
P-59 405.08
MW-16 405.66
MW-12 406.08
MW-20 405.37
P-56 405.31
MW-2 405.54
MW-1 405.94
W-79
405.10 S-1
P-71 405.60
T-6 405.49
MW-26 405.99
MW-21 405.62
P-57 405.58
W-80
P-73 404.72
MW-3 406.49
MW-4 406.06
P-93A 405.60
MW-25 406.18
MW-23 407.03
MW-5 406.52
MW-7 405.92
P-72
W-89
MW-8 406.37
P-58 405.66
P-66 406.02
P-75 405.60
MW-6A 406.73
MW-6B
MW-6C
MW-6D
MW-13 407.01
P-117 407.61
P-114R 407.63
MW-14 406.63
W-81
P-116 407.69
P-115
P-119 407.36
T-7 406.93
P-67 407.00
T-64 407.60
T-63 407.85
T-62 407.69

406.5 406 405.5 405 407 407.5 408

0 300
SCALE FEET
N

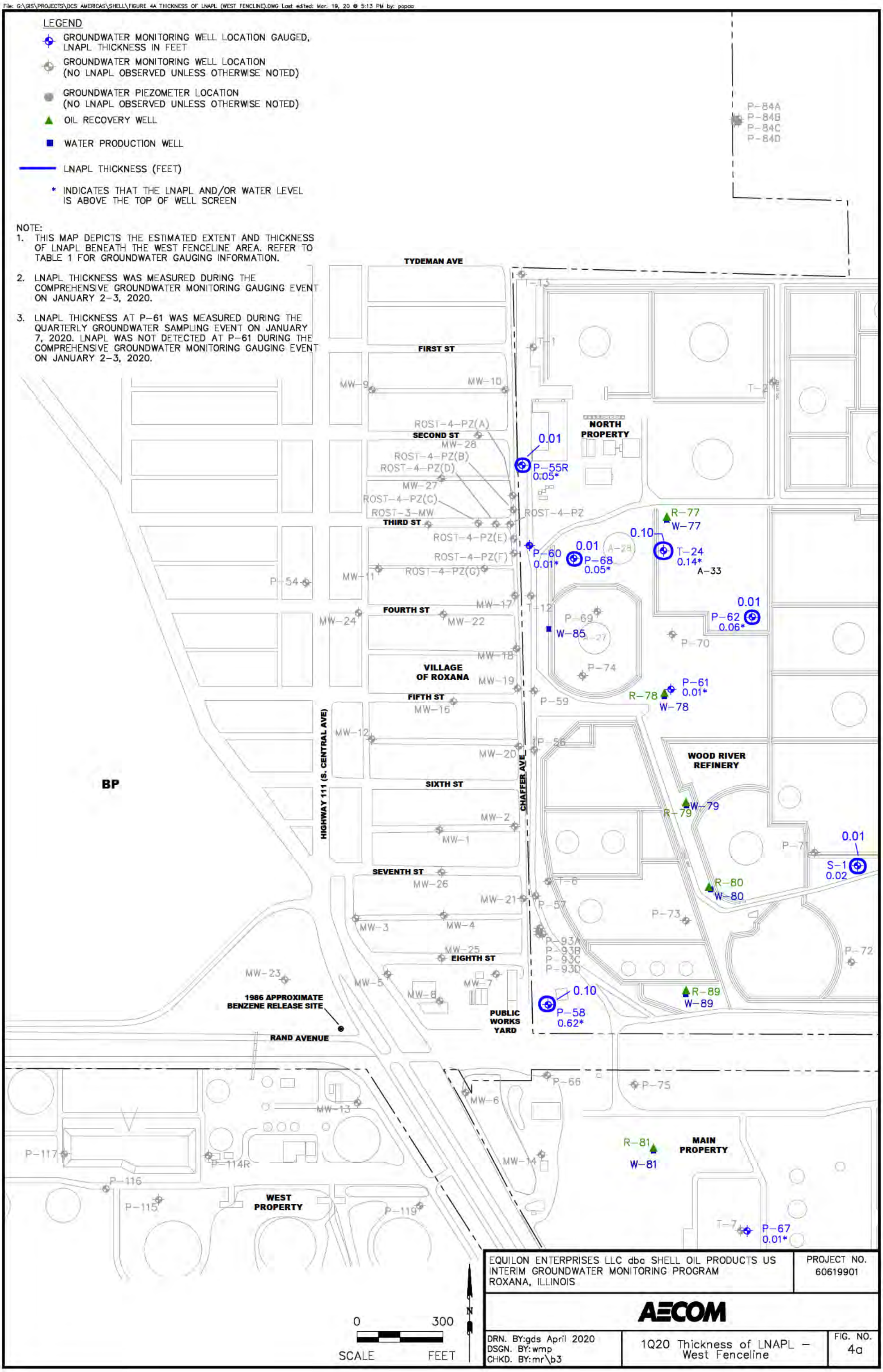
EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60619901
AECOM	
DRN. BY: gds April 2020 DSGN. BY: gds CHKD. BY: mr/b3	Groundwater Contours 1Q20– West Fenceline
	FIG. NO. 3b

File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE).DWG Last edited: Mar. 19, 20 @ 5:13 PM by: popaa

LEGEND

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

NOTE:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCELINE AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JANUARY 2-3, 2020.
3. LNAPL THICKNESS AT P-61 WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON JANUARY 7, 2020. LNAPL WAS NOT DETECTED AT P-61 DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JANUARY 2-3, 2020.

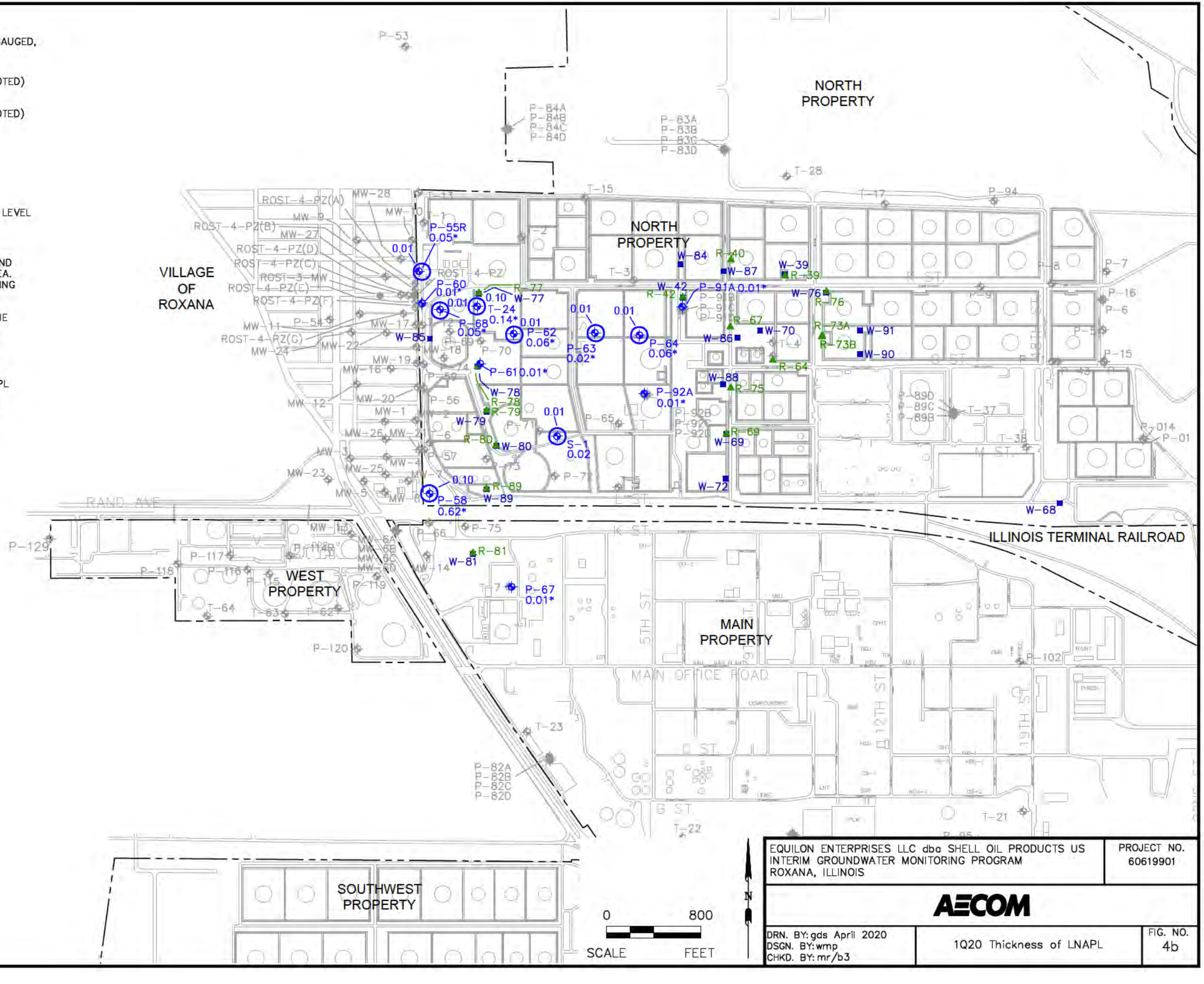


EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60619901
AECOM		
DRN. BY:gds April 2020 DSGN. BY: wmp CHKD. BY: mr\b3	1Q20 Thickness of LNAPL – West Fenceline	FIG. NO. 4a

LEGEND

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

NOTES:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WRR AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JANUARY 2-3, 2020.
3. LNAPL THICKNESS AT P-61 WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON JANUARY 7, 2020. LNAPL WAS NOT DETECTED AT P-61 DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JANUARY 2-3, 2020.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60619901
AECOM		
DRN. BY: gds April 2020 DSGN. BY: wmp CHKD. BY: mr/b3	1Q20 Thickness of LNAPL	FIG. NO. 4b

File: G:\GIS\PROJECTS\OCS AMERICAS\SHELL\FIGURE 4B THICKNESS OF LNAPL (REFINERY).DWG Last edited: Mar. 19, 20 @ 3:19 PM by: pgoss

File: G:\GIS\PROJECTS\DCS_AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA_1Q20_GW_RPT_PART_2\WORKSPACE\FIGURE_5_4Q19_GROUNDWATER_ANALYTICAL_RESULTS_SUMMARY.DWG Last edited: Mar. 09, 20 @ 11:47 AM by: pagga

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
Methyl tert-Butyl Ether (MTBE)	0.07
1,2,4-Trimethylbenzene	0.07
Benzo(a)anthracene	0.00013
bis(2-Ethylhexyl)phthalate	0.006
2-Methylnaphthalene	0.028
Pentachlorophenol	0.001
Phenol	0.1

J = THE RESULT IS ESTIMATED.

H = SAMPLE WAS EXTRACTED BY LABORATORY OUTSIDE HOLDING TIME CRITERIA.

3. MULTIPLE RESULTS (e.g., 800/750) 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 1Q20 DUE TO THE PRESENCE OF LNAPL.
6. DATA FROM THE PENTACHLOROPHENOL CONFIRMATION RE-ANALYSIS WAS USED FOR WELLS MW-4, MW-6B, MW-7, MW-8, MW-14, MW-22, MW-23, MW-24, P-54 AND P-114R; SEE TABLE 3 FOR ORIGINAL AND CONFIRMATION PENTACHLOROPHENOL RESULTS.

Sample Location	MW-28
Sampled 1/10/2020	Result (mg/L)
Benzene	0.0067
Methyl tert-Butyl Ether (MTBE)	0.079

Sample Location	ROST-4-PZ(E)
Sampled 1/7/2020	Result (mg/L)
Benzene	0.037
1,2,4-Trimethylbenzene	0.14
Benzo(a)anthracene	0.0002
bis(2-Ethylhexyl)phthalate	0.0081 J
2-Methylnaphthalene	0.07

Sample Location	T-12
Sampled 1/9/2020	Result (mg/L)
Benzene	1.7 / 1.8

Sample Location	P-74
Sampled 1/8/2020	Result (mg/L)
Benzene	0.014

Sample Location	P-59
Sampled 1/9/2020	Result (mg/L)
Benzene	1.6
1,2,4-Trimethylbenzene	0.19

Sample Location	P-57
Sampled 1/9/2020	Result (mg/L)
Benzene	1.3
2-Methylnaphthalene	0.033

Sample Location	P-93A	P-93B
Sampled 1/8, 1/9/2020	Result (mg/L)	Result (mg/L)
Benzene	56 / 57	94 / 100
Phenol		0.19 J / 0.09 J

Sample Location	MW-25
Sampled 1/6/2020	Result (mg/L)
Benzene	0.028

Sample Location	MW-7
Sampled 1/6/2020	Result (mg/L)
Benzene	800 / 750

Sample Location	P-66
Sampled 1/7/2020	Result (mg/L)
1,2,4-Trimethylbenzene	0.042

Sample Location	MW-8
Sampled 1/6/2020	Result (mg/L)
Benzene	42
Phenol	0.2

Sample Location	P-114R
Sampled 1/6/2020	Result (mg/L)
Pentachlorophenol	0.0021 J H J

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, P-69, WOOD RIVER REFINERY, MW-24, FOURTH ST, MW-22, P-70, A-27, MW-18, MW-19, P-59, P-74, P-61, FIFTH ST, MW-16, MW-12, VILLAGE OF ROXANA, MW-20, P-56, 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-7, MW-23, 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, P-114R, MW-14

0 200 SCALE FEET

N

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

PROJECT NO. 60619901

AECOM

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

1Q20 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

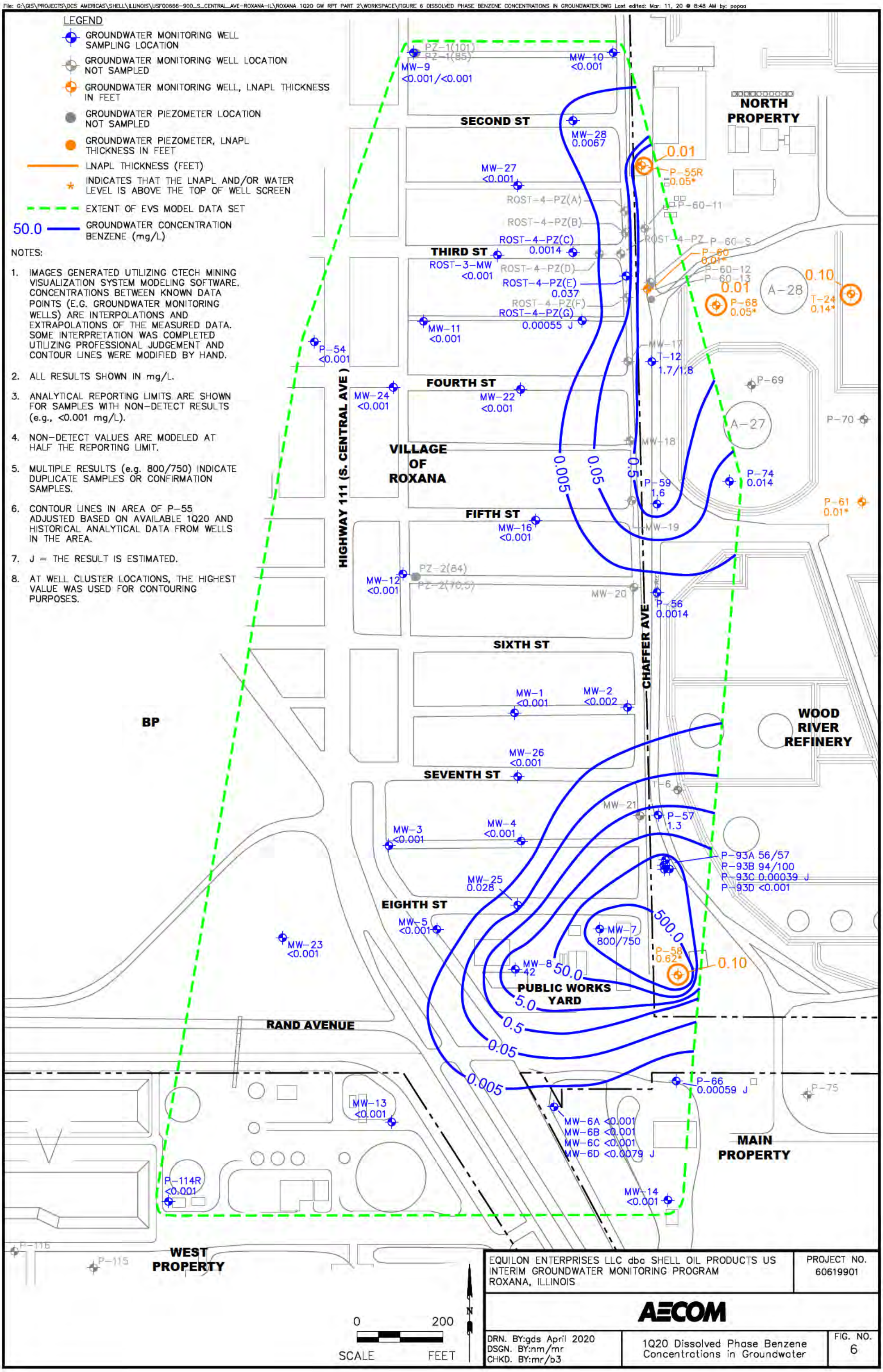
File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q20 GW RPT PART 2\WORKSPACE\FIGURE 6 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Mar. 11, 20 @ 8:48 AM by: popaa

LEGEND

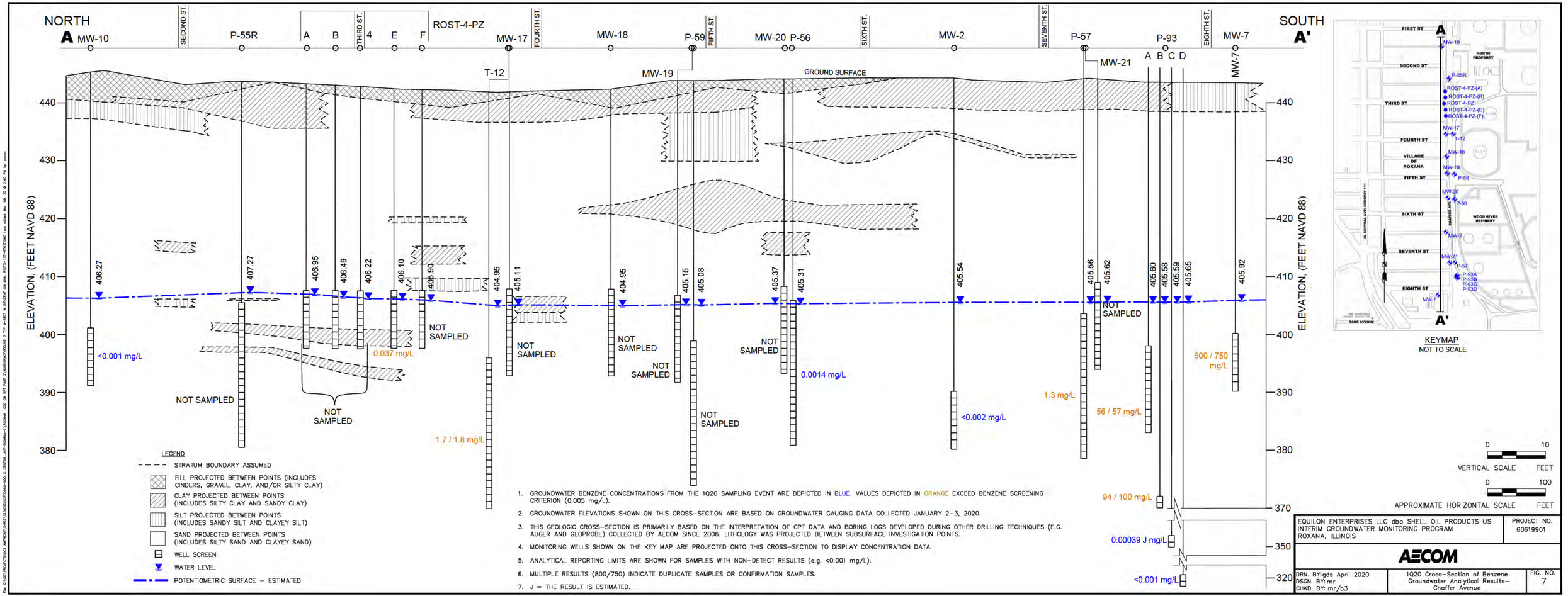
- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER MONITORING WELL, LNAPL THICKNESS IN FEET
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER, LNAPL THICKNESS IN FEET
- LNAPL THICKNESS (FEET)
- * INDICATES THAT THE LNAPL AND/OR WATER LEVEL IS ABOVE THE TOP OF WELL SCREEN
- EXTENT OF EVS MODEL DATA SET
- 50.0 GROUNDWATER CONCENTRATION BENZENE (mg/L)

NOTES:

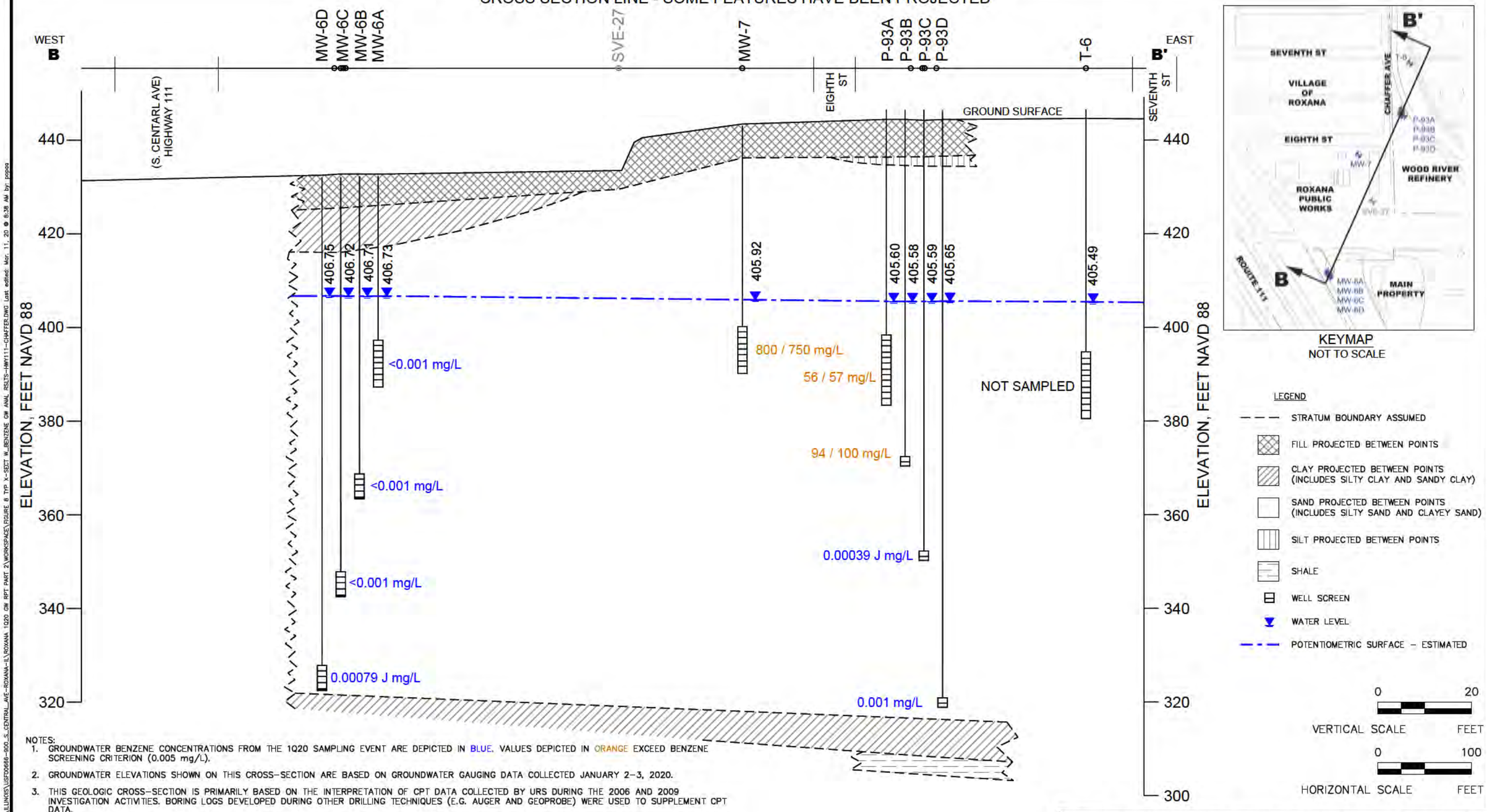
1. IMAGES GENERATED UTILIZING CTECH MINING VISUALIZATION SYSTEM MODELING SOFTWARE. CONCENTRATIONS BETWEEN KNOWN DATA POINTS (E.G. GROUNDWATER MONITORING WELLS) ARE INTERPOLATIONS AND EXTRAPOLATIONS OF THE MEASURED DATA. SOME INTERPRETATION WAS COMPLETED UTILIZING PROFESSIONAL JUDGEMENT AND CONTOUR LINES 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. 800/750) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55 ADJUSTED BASED ON AVAILABLE 1Q20 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 April 2020 DSGN. BY:nm/mr CHKD. BY:mr/b3	1Q20 Dissolved Phase Benzene Concentrations in Groundwater
	FIG. NO. 6


NORTH
A
MW-10
SECOND ST.
P-55R
A
B
THIRD ST.
4
E
F
ROST-4-PZ
MW-17
FOURTH ST.
MW-18
P-59
FIFTH ST.
MW-20
P-56
SIXTH ST.
MW-2
SEVENTH ST.
P-57
P-93
EIGHTH ST.
MW-7
SOUTH
A'
T-12
MW-19
MW-21
A B C D
GROUND SURFACE
ELEVATION, (FEET NAVD 88)
440
430
420
410
400
390
380
370
350
320
406.27
407.27
406.95
406.49
406.22
406.10
405.90
404.95
405.11
404.95
405.15
405.08
405.37
405.31
405.54
405.56
405.62
405.60
405.58
405.59
405.65
405.92
<0.001 mg/L
NOT SAMPLED
0.037 mg/L
NOT SAMPLED
NOT SAMPLED
NOT SAMPLED
NOT SAMPLED
NOT SAMPLED
NOT SAMPLED
1.7 / 1.8 mg/L
0.0014 mg/L
<0.002 mg/L
1.3 mg/L
NOT SAMPLED
56 / 57 mg/L
800 / 750 mg/L
94 / 100 mg/L
0.00039 J mg/L
<0.001 mg/L
LEGEND
STRATUM BOUNDARY ASSUMED
FILL PROJECTED BETWEEN POINTS (INCLUDES CINDERS, GRAVEL, CLAY, AND/OR SILTY CLAY)
CLAY PROJECTED BETWEEN POINTS (INCLUDES SILTY CLAY AND SANDY CLAY)
SILT PROJECTED BETWEEN POINTS (INCLUDES SANDY SILT AND CLAYEY SILT)
SAND PROJECTED BETWEEN POINTS (INCLUDES SILTY SAND AND CLAYEY SAND)
WELL SCREEN
WATER LEVEL
POTENTIOMETRIC SURFACE – ESTIMATED
1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 1Q20 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JANUARY 2–3, 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 (800/750) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.
FIRST ST
SECOND ST
THIRD ST
FOURTH ST
VILLAGE OF ROXANA
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
NORTH PROPERTY
WOOD RIVER REFINERY
CHAFFEE AVE
RAND AVENUE
MW-10
P-55R
ROST-4-PZ-(A)
ROST-4-PZ-(B)
ROST-4-PZ-
ROST-4-PZ-(E)
ROST-4-PZ-(F)
MW-17
T-12
MW-18
MW-19
P-59
MW-20
P-56
MW-2
MW-21
P-57
P-93A
P-93B
P-93C
P-93D
MW-7
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 April 2020
DSGN. BY: mr
CHKD. BY: mr/bJ
1Q20 Cross-Section of Benzene Groundwater Analytical Results– Chaffee 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 1Q20 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JANUARY 2-3, 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 (800/750) 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 April 2020 DSGN. BY:mr CHKD. BY:mr/b3	1Q20 Cross-Section of Benzene Groundwater Analytical Results-Roxana Public Works Yard
	FIG. NO. 8

File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USP00686-900.S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q20 GW RPT PART 2\WORKSPACE\FIGURE 8 TYP X-SECT W_BENZENE GW ANAL RSLTS-HWY111-CHAFFER.DWG Last edited: Mar. 11, 20 @ 8:38 AM by pppa

Appendix A

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW | PROJECT NUMBER: 60619901 - 1.03.004 | FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/9/20 | WEATHER: Cloudy, 50s

MONITORING WELL ID: MW-1 | SAMPLE ID: MW1-ROX-010920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~53.80' ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 59.13 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.09 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): 48.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 22.04 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 TOTAL WELL DEPTH -2 FT: 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	1140	37.09'	Cloudy	None	15.8	3.86	0.795 mS/cm uS/cm	7.65	139.1	72.3
~1500	1145		Hazy		16.9	0.75	0.805 mS/cm uS/cm	7.18	138.4	33.4
~3000	1150				18.0	0.35	0.812 mS/cm uS/cm	7.13	131.7	21.7
~3900	1153				18.0	0.26	0.820 mS/cm uS/cm	7.12	128.3	15.8
~4200	1154				18.1	0.23	0.826 mS/cm uS/cm	7.11	127.2	13.8
~4500	1155				18.0	0.21	0.832 mS/cm uS/cm	7.11	126.0	12.2
~4800	1156				18.0	0.20	0.839 mS/cm uS/cm	7.11	124.9	11.2
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1140 | Elapsed Time (min): ~16min | Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1156 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 | Sample Time: 1200 | 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Rogatz, B. Burleson

DATE: 1/9/20 WEATHER: Cloudy, 50s

MONITORING WELL ID: MW-2 SAMPLE ID: MW2-ROX-010920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~54.87' ft btoc
Total Well Depth (btoc): 60.20 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 38.52 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): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 21.68 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: 99.0 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	1251	38.55	Cloudy Grey	Moderate	15.6	4.80	1.316	mS/cm uS/cm	7.59	124.8	67.4
~1500	1256	38.55	Cloudy Grey	Strong	18.2	0.55	1.427	mS/cm uS/cm	7.05	113.9	47.0
~3000	1301	38.55	Hazy Grey	Strong	18.5	0.37	1.444	mS/cm uS/cm	7.03	101.4	26.7
~3900	1304		↓	↓	18.5	0.32	1.452	mS/cm uS/cm	7.03	93.7	20.9
~4200	1305				18.5	0.19	1.453	mS/cm uS/cm	7.04	90.9	20.8
~4500	1306				18.5	0.17	1.454	mS/cm uS/cm	7.05	88.3	20.3
~4800	1307				18.5	0.16	1.456	mS/cm uS/cm	7.06	86.1	20.4
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
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								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1251 Elapsed Time (min): ~16 min Water Quality Meter ID & SN: YSI ProDSS - 19C101072

Stop Time: 1307 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 Sample Time: 1310 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Rugatz, B. Burleson

DATE: 1/10/20 WEATHER: Rain - 50s

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-011020

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~39.67 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 45.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 24.02 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 34.67 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft	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): 20.98 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	0839	24.04	Clear	Slight	16.7	4.47	1.518 mS/cm uS/cm	6.28	218.5	5.7
~500	~~0844~~ 0844				18.2	0.50	1.284 mS/cm uS/cm	6.56	215.8	4.0
~800	0849				18.2	0.27	1.284 mS/cm uS/cm	6.67	209.3	3.1
~3900	0852				18.2	0.21	1.284 mS/cm uS/cm	6.70	205.1	3.2
~4200	0853				18.2	0.19	1.285 mS/cm uS/cm	6.71	203.4	3.4
~4500	0854				18.3	0.18	1.284 mS/cm uS/cm	6.72	200.7	3.1
~4800	0855				19.3	0.17	1.283 mS/cm uS/cm	6.73	198.8	3.6
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 0839 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 0855 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/10/20

SAMPLING DATA

Sample Date: 1/10/20 Sample Time: 0900 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~300 QA/QCSamples: MW3-ROX-011020-MS, MW3-ROX-011020-MSD

VOA Vials, No Headspace ☑ Initials: JB, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Rogalz, B. Burleson

DATE: 1/6/2020 WEATHER: Clear 30s

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX-010620

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): 35.54 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 45.06 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 19.85 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
					STABLE: (over 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	0906	35.55	Clear	Slight	16.0	2.30	1.442	mS/cm uS/cm	6.35	240.1	11.1
~300	0907	↓	↓	↓	16.3	1.42	1.436	mS/cm uS/cm	6.48	234.5	10.4
~600	0908				16.7	0.73	1.441	mS/cm uS/cm	6.58	224.6	9.7
~900	0909				17.0	0.57	1.441	mS/cm uS/cm	6.63	218.8	9.0
~1200	0910				17.1	0.48	1.440	mS/cm uS/cm	6.65	214.4	8.8
~1500	0911				17.2	0.40	1.441	mS/cm uS/cm	6.68	210.5	8.8
~1800	0912				17.3	0.35	1.438	mS/cm uS/cm	6.69	206.9	8.6
~2100	0913				17.3	0.30	1.438	mS/cm uS/cm	6.71	203.9	8.9
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0906 Elapsed Time (min): ~7 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 0913 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/20 Sample Time: 0915 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~300 QA/QCSamples: MW4-ROX-010620-EB@0820

VOA Vials, No Headspace ☑ Initials: JR, BB

COMMENTS:

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

Total Purge Volume: ~2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M.D'Angelo B.Howell

DATE: 1/6/2020 WEATHER: sunny 40's

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-ROX-010620

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): 23.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 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): 20.62 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
		STABLE: (over 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	1304	23.70	CLEAR	none	16.9	5.15	1.418 mS/cm uS/cm	7.06	-126.5	7.14
300	1305	23.70			17.0	4.56	1.416 mS/cm uS/cm	7.06	-128.5	7.30
600	1306	23.70			17.2	3.88	1.406 mS/cm uS/cm	7.05	-131.2	6.91
900	1307				17.4	3.52	1.400 mS/cm uS/cm	7.05	-132.3	6.82
1200	1308				17.5	3.01	1.386 mS/cm uS/cm	7.05	-134.4	7.22
1500	1309				17.6	2.74	1.375 mS/cm uS/cm	7.04	-135.6	7.50
1800	1310				17.8	2.47	1.368 mS/cm uS/cm	7.04	-136.9	7.66
2100	1311				17.9	2.29	1.366 mS/cm uS/cm	7.04	-137.9	7.78
2400	1312				17.9	2.13	1.366 mS/cm uS/cm	7.04	-138.9	8.19
2700	1313				18.0	2.02	1.366 mS/cm uS/cm	7.04	-139.9	8.87
3000	1314				18.1	1.90	1.370 mS/cm uS/cm	7.04	-140.9	9.39
3300	1315				18.1	1.81	1.373 mS/cm uS/cm	7.04	-141.7	10.19
3600	1316				18.1	1.72	1.375 mS/cm uS/cm	7.04	-142.6	11.08
3900	1317				18.1	1.67	1.377 mS/cm uS/cm	7.04	-143.0	11.42
4200	1318				18.0	1.61	1.377 mS/cm uS/cm	7.04	-143.6	13.28
							mS/cm uS/cm			

MD Sampled 1/6/20

Start Time: 1304 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1318 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/2020 Sample Time: 1320 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MD BH

COMMENTS:

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

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragate, B. Berleson

DATE: 1/8/20 WEATHER: Clear, 30s

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-ROX-010820

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	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 26.03 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Depth to LNAPL/DNAPL (btoc): — 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): 33.85 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 18.15 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	0837	26.03'	Clear	Slight	16.7	4.92	1.185 mS/cm uS/cm	5.81	226.3	16.4
~1500	0842	26.03'	Hazy	Moderate	18.1	0.45	1.119 mS/cm uS/cm	6.50	202.6	23.5
~3000	0847	26.03'	Hazy	Moderate	18.5	0.29	1.116 mS/cm uS/cm	6.59	180.8	24.5
~3900	0850	↓	↓	↓	18.3	0.24	1.122 mS/cm uS/cm	6.62	167.6	23.3
~4200	0851				18.4	0.22	1.123 mS/cm uS/cm	6.62	162.1	23.5
~4500	0852				18.4	0.21	1.122 mS/cm uS/cm	6.63	157.7	23.4
~4800	0853				18.4	0.20	1.122 mS/cm uS/cm	6.64	153.0	24.2
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

Start Time: 0837 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 19C101072

Stop Time: 0853 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 0855 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~300 QA/QCSamples: MW6A-ROX-010820-MS, MW6A-ROX-010820-MSD

VOA Vials, No Headspace ☑ Initials: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Rogatz, B. Burleson

DATE: 1/8/20 WEATHER: Clear, 30s

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B-ROX-010820

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~66.55' ft btoc
Total Well Depth (btoc): 69.38 ft	
Depth to Water (btoc): 26.09 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): — 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
Screen Length: 5 ft	
Water Column Height (not including NAPL): 43.29 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — 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	0945	26.09	Clear	Slight	16.9	5.27	0.880	mS/cm uS/cm	7.68	108.4	3.0
~1200	0950	26.08	Clear	Slight	18.2	0.63	1.064	mS/cm uS/cm	6.99	103.8	3.7
~3000	0955	26.08	Clear	Slight	18.3	0.36	1.069	mS/cm uS/cm	6.98	88.3	2.5
~3800	0959	26.08	Clear	Slight	17.8	0.28	1.084	mS/cm uS/cm	6.98	79.1	2.0
~4200	0959				17.9	0.27	1.087	mS/cm uS/cm	6.99	75.8	1.8
~4500	1000				17.1	0.16	1.087	mS/cm uS/cm	6.99	72.3	1.5
~4800	1001				17.0	0.25	1.088	mS/cm uS/cm	6.99	69.0	1.7
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 0945 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1001 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1005 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/8/20 WEATHER: Clear, 30s

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C-ROX-010820

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~87.45 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 90.28 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 25.86 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 84.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 64.42 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 TOTAL WELL DEPTH -2 FT: — 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	1037	25.86	Clear	None	14.4	7.50	0.909	mS/cm uS/cm	8.08	125.5	6.3
~1500	1042				13.7	0.57	0.920	mS/cm uS/cm	7.18	105.6	5.07
~3000	1047				9.0	0.45	0.938	mS/cm uS/cm	7.14	81.0	4.3
~3900	1050				8.7	0.34	0.947	mS/cm uS/cm	7.15	64.6	4.1
~4200	1051				8.9	0.32	0.946	mS/cm uS/cm	7.15	60.0	5.5
~4500	1052				8.7	0.30	0.947	mS/cm uS/cm	7.16	55.2	5.3
~4800	1053				18.6	0.29	0.948	mS/cm uS/cm	7.16	50.1	5.2
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1037 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1053 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1055 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Rogatz, B. Burleson

DATE: 1/8/20 WEATHER: Clear, 40s

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-010820

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 107.22 ft btoc
Total Well Depth (btoc): 110.05 ft	
Depth to Water (btoc): 25.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Screen Length: 5 ft	
Water Column Height (not including NAPL): 84.37 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	1146	25.71	Clear	None	16.6	7.78	0.955	mS/cm uS/cm	7.75	100.7	4.8
~1500	1151	25.69	Cloudy	↓	17.6	0.85	1.163	mS/cm uS/cm	7.10	92.6	55.5
~3000	1156	25.68	Cloudy		19.1	0.60	1.198	mS/cm uS/cm	7.08	72.0	105.2
~4500	1201	25.68	Cloudy		18.5	0.43	1.205	mS/cm uS/cm	7.09	49.1	51.4
~5400	1204	25.68	Hazy		18.1	0.41	1.210	mS/cm uS/cm	7.09	36.2	46.0
~6300	1207	25.68	Hazy		18.1	0.40	1.203	mS/cm uS/cm	7.09	21.5	35.2
~6600	1208	25.68			18.3	0.33	1.207	mS/cm uS/cm	7.10	17.4	34.2
~6900	1209	25.68			18.4	0.28	1.210	mS/cm uS/cm	7.11	8.8	33.7
~7200	1210	25.68	↓	↓	18.2	0.25	1.209	mS/cm uS/cm	7.11	2.8	30.5
								mS/cm uS/cm			
								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: 1146 Elapsed Time (min): ~24min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1210 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1215 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~7200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/6/20 WEATHER: Clear, 40s

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX-010620

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~47.92 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 52.92 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: ~~0~~ 0.1 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 600.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.32 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 TOTAL WELL DEPTH -2 FT: — 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	1225	37.63	Cloudy	Strong	15.5	2.72	1.569	mS/cm uS/cm	7.03	92.8	95.6
~1500	1230	37.62	↓	↓	17.8	0.89	1.594	mS/cm uS/cm	6.70	83.0	98.0
~3000	1235	37.62			17.9	1.17	1.609	mS/cm uS/cm	6.68	74.2	66.5
~4500	1240	37.62			18.2	1.35	1.618	mS/cm uS/cm	6.69	63.6	44.2
~4800	1241	37.62			18.3	1.35	1.621	mS/cm uS/cm	6.69	61.1	39.9
~5100	1242	37.62			18.3	1.37	1.621	mS/cm uS/cm	6.70	58.8	38.7
~5400	1243	37.62			18.3	1.39	1.623	mS/cm uS/cm	6.70	56.0	36.1
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 1225 Elapsed Time (min): ~18 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1243 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/20 Sample Time: 1245 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~300 QA/QCSamples: MW7-ROX-010620-Dup

VOA Vials, No Headspace ☑ Initials: JR, BB

COMMENTS:

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

Initial Turbidity was High, Observed Parameters Every 5mins until Turbidity Showed Decrease in Readings.

Total Purge Volume: ~5400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J.Ragatz, B.Barleson

DATE: 1/6/20 WEATHER: Clear 40s

MONITORING WELL ID: MW-8 SAMPLE ID: MW8-ROX-010620

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~38.60' ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 43.60 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 28.35 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 33.60 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 3.7 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.25 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — 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	1100	28.36	Clear	Moderate	15.1	4.23	1.613	mS/cm uS/cm	6.93	138.3	4.8
~300	1101				16.9	1.30	.815	mS/cm uS/cm	6.76	136.0	4.4
~600	1102				17.2	0.77	.837	mS/cm uS/cm	6.77	132.6	4.16
~900	1103				17.4	0.61	.834	mS/cm uS/cm	6.77	129.8	4.7
~1200	1104				17.7	0.48	.833	mS/cm uS/cm	6.78	125.3	5.16
~1500	1105				17.8	0.39	.829	mS/cm uS/cm	6.79	120.3	5.9
~1800	1106				17.9	0.33	.826	mS/cm uS/cm	6.79	115.2	6.6
~2100	1107				18.0	0.27	.824	mS/cm uS/cm	6.80	109.1	6.7
~2400	1108				18.0	0.25	.821	mS/cm uS/cm	6.81	103.2	7.1
								mS/cm uS/cm			
								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: 1100 Elapsed Time (min): ~8min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1108 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/20 Sample Time: 1110 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW | PROJECT NUMBER: 60619901 - 1.03.004 | FIELD PERSONNEL: J. Rogatz, B. Burleson

DATE: 1/13/20 | WEATHER: Cloudy, 30s

MONITORING WELL ID: MW-9 | SAMPLE ID: MW9-ROX-011320

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~51.04' ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 56.37 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.95 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): 46.04 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 17.42 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 TOTAL WELL DEPTH -2 FT: 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	1155	38.97	Hazy	None	13.8	4.09	1.733 mS/cm uS/cm	7.25	193.7	13.9
~1500	1200	38.96	Cloudy		16.1	0.76	2.113 mS/cm uS/cm	6.82	188.5	54.8
~3000	1205		↓		16.9	0.69	2.109 mS/cm uS/cm	6.82	177.0	111.8
~4500	1210		Hazy		17.1	0.58	2.107 mS/cm uS/cm	6.82	169.3	101.6
~6000	1215				17.0	0.45	2.102 mS/cm uS/cm	6.82	157.8	43.1
~6900	1218				17.3	0.29	2.100 mS/cm uS/cm	6.82	152.0	35.4
~7200	1219				17.1	0.25	2.100 mS/cm uS/cm	6.82	149.9	33.0
~7500	1220				17.3	0.24	2.103 mS/cm uS/cm	6.82	147.8	32.2
~7800	1221	↓	↓	↓	17.3	0.21	2.101 mS/cm uS/cm	6.82	146.0	35.7
							mS/cm uS/cm			
							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: 1155 | Elapsed Time (min): ~26 min | Water Quality Meter ID & SN: YSI ProDSS - 18C10027

Stop Time: 1221 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 1/13/20

SAMPLING DATA

Sample Date: 1/13/20 | Sample Time: 1225 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): ~300 | QA/QCSamples: MW9-ROX-011320-DUP

VOA Vials, No Headspace ☑ Initials: JR, BB

COMMENTS:

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

Total Purge Volume: ~7800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Barlesos

DATE: 1/10/20 WEATHER: Rain - 50s

MONITORING WELL ID: MW-10 SAMPLE ID: MW10-ROX-011020

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~49.43' ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 54.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 39.09 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): 44.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.71 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 TOTAL WELL DEPTH -2 FT: 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	0944	39.09	Cloudy	None	15.8	5.19	1.266 mS/cm uS/cm	7.02	172.9	114.4
~1500	0949	↓	Hazy	↓	17.3	0.67	1.327 mS/cm uS/cm	6.76	174.9	31.3
~3000	0954	↓	↓	↓	17.6	0.36	1.327 mS/cm uS/cm	6.81	164.4	19.4
~3900	0957	↓	↓	↓	17.5	0.28	1.330 mS/cm uS/cm	6.83	157.3	20.2
~4200	0958	↓	↓	↓	17.6	0.26	1.330 mS/cm uS/cm	6.84	154.0	21.4
~4500	0959	↓	↓	↓	17.4	0.24	1.331 mS/cm uS/cm	6.85	150.9	24.4
~4800	1000	↓	↓	↓	17.2	0.23	1.331 mS/cm uS/cm	6.85	148.6	23.2
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0944 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1000 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/10/20

SAMPLING DATA

Sample Date: 1/10/20 Sample Time: 1005 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/7/20 WEATHER: Clear, 30s

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX-010720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~46.66 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 51.99 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 36.45 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): — ft			
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 15.54 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 TOTAL WELL DEPTH -2 FT: — 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	36.46	Clear	Slight	13.5	3.60	1.169	mS/cm uS/cm	6.96	219.9	6.3
~1500	1045	36.45			15.9	0.47	1.513	mS/cm uS/cm	6.69	209.3	3.7
~3000	1050	36.45			16.0	0.25	1.506	mS/cm uS/cm	6.75	195.2	3.5
~3300	1051	36.45			16.1	0.22	1.506	mS/cm uS/cm	6.76	191.6	3.6
~3600	1052	36.45			16.2	0.20	1.502	mS/cm uS/cm	6.77	188.3	3.6
~3900	1053	36.45			16.2	0.19	1.502	mS/cm uS/cm	6.77	186.0	3.6
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								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): ~13min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1053 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 Sample Time: 1055 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: JR, BB

COMMENTS:

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

Parameters Changing Moderately, Watched in 5min Interval until Steady Stabilization.

Total Purge Volume: ~3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW | PROJECT NUMBER: 60619901 - 1.03.004 | FIELD PERSONNEL: J. Rougeux, B. Burleson

DATE: 1/7/20 | WEATHER: Clear, 40s

MONITORING WELL ID: MW-12 | SAMPLE ID: MW12-RDX-010720

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~46.92 ft btoc
Total Well Depth (btoc): 52.25 ft	
Depth to Water (btoc): 36.78 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 15.47 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 TOTAL WELL DEPTH -2 FT: — 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	1320	36.81	Hazy	Slight	15.3	5.00	0.978 mS/cm uS/cm	7.46	150.1	53.3
~1500	1325	36.79			16.7	0.79	1.017 mS/cm uS/cm	7.02	136.6	47.0
~3000	1330	36.79			16.7	0.45	1.018 mS/cm uS/cm	6.97	121.8	39.2
~4500	1335	36.79			16.9	0.24	1.024 mS/cm uS/cm	6.94	108.9	29.6
~4800	1336	36.79			17.1	0.22	1.026 mS/cm uS/cm	6.94	106.4	26.9
~5100	1337	36.79			17.0	0.20	1.027 mS/cm uS/cm	6.94	104.2	25.6
~5400	1338	36.79			16.9	0.19	1.030 mS/cm uS/cm	6.94	102.2	24.2
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1320 | Elapsed Time (min): ~18 min | Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1338 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 | Sample Time: 1340 | 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: JR, BB

COMMENTS:

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

DO Started High, Observed Parameters @ 5min Interval until Steady Stabilization.

Total Purge Volume: ~5400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/6/2020 WEATHER: Sunny 40's

MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-010620

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 29.80 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 35.05 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 23.41 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): 24.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.64 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	1045	23.43	L.Brown	Slight non-HC	16.0	7.25	1.872 (mS/cm) uS/cm	6.69	-86.5	144.03
3000	1055	23.42			18.2	2.54	1.759 (mS/cm) uS/cm	6.61	-101.7	91.52
6000	1105	23.42			18.1	1.20	1.690 (mS/cm) uS/cm	6.67	-113.1	34.85
6300	1106	23.42			18.0	1.18	1.686 (mS/cm) uS/cm	6.65	-113.5	30.82
6600	1107				17.6	1.16	1.670 (mS/cm) uS/cm	6.65	-113.8	38.27
6900	1108				18.2	1.13	1.667 (mS/cm) uS/cm	6.65	-114.7	32.86
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

M. D'Angelo 1/6/2020

Start Time: 1045 Elapsed Time (min): 23 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1108 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/2020 Sample Time: 1110 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Due to high turbidity, readings taken at longer intervals

Total Purge Volume: 6900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M.DiAngelo B.Howell

DATE: 1/7/20 WEATHER: Sunny 40°s

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-010720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.42 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 44.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 28.03 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 33.42 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 61.2 ppm	
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 TOTAL WELL DEPTH -2 FT: ft btoc		

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	1029	28.05	clear	Slight HC	14.5	9.16	1.505 mS/cm uS/cm	6.19	12.3	2.01
300	1030	28.05			15.4	7.34	1.565 mS/cm uS/cm	6.40	-37.3	4.41
600	1031	28.05			15.9	6.00	1.588 mS/cm uS/cm	6.53	-55.6	7.02
900	1032				16.6	4.97	1.599 mS/cm uS/cm	6.61	-69.0	8.32
1200	1033				17.1	4.09	1.611 mS/cm uS/cm	6.69	-80.5	10.17
1500	1034				17.0	3.53	1.610 mS/cm uS/cm	6.74	-87.3	10.12
1800	1035				17.6	3.12	1.614 mS/cm uS/cm	6.76	-91.6	8.85
2100	1036				17.4	2.82	1.623 mS/cm uS/cm	6.78	-94.9	7.16
2400	1037				17.8	2.61	1.625 mS/cm uS/cm	6.79	-97.0	6.00
3900	1038				17.5	1.96	1.653 mS/cm uS/cm	6.82	-104.0	2.99
4200	1043				17.6	1.91	1.654 mS/cm uS/cm	6.83	-104.7	2.29
4500	1044				17.7	1.86	1.655 mS/cm uS/cm	6.83	-105.4	1.71
4800	1045				17.7	1.78	1.660 mS/cm uS/cm	6.83	-106.4	1.19
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

M.DiAngelo 1/7/2020

Start Time: 1029 Elapsed Time (min): 16 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1045 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 Sample Time: 1050 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragaitz, B. Borleson

DATE: 1/9/20 WEATHER: Cloudy, 40s

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX-010920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 47.75 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.16 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~42.96 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 37.50 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.59 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	0850	38.17	Cloudy	None	13.5	5.53	1.950	mS/cm uS/cm	6.32	243.8	84.5
~1500	0855	38.16			17.7	1.05	1.614	mS/cm uS/cm	6.51	238.3	68.7
~3000	0900	38.16			17.5	0.98	1.599	mS/cm uS/cm	6.64	227.7	34.3
~3900	0903	38.16			17.6	0.96	1.602	mS/cm uS/cm	6.67	224.4	24.4
~4200	0904	38.16			17.5	0.97	1.601	mS/cm uS/cm	6.67	223.6	22.8
~4500	0905	38.16			17.5	0.98	1.602	mS/cm uS/cm	6.68	223.0	21.9
~4800	0906	38.16			17.4	1.00	1.602	mS/cm uS/cm	6.69	222.5	21.4
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
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								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0850 Elapsed Time (min): ~11 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 0906 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 Sample Time: 0910 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~300 QA/QCSamples: MW16-ROX-010920-MS, MW16-ROX-010920-MSD

VOA Vials, No Headspace ☑ Initials: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/6/2020 WEATHER: sunny 40's

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-ROX-010620

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.43 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.85 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	1217	36.85	CLEAR	NONE	16.9	6.23	1.642 mS/cm uS/cm	7.19	-74.5	8.79
300	1218	36.85			16.9	4.97	1.664 mS/cm uS/cm	7.17	-79.4	7.74
600	1219	36.85			16.7	4.16	1.669 mS/cm uS/cm	7.16	-82.8	7.73
900	1220	36.85			16.8	3.67	1.669 mS/cm uS/cm	7.15	-84.9	10.42
1200	1221				17.5	3.14	1.665 mS/cm uS/cm	7.14	-88.4	12.49
1500	1222				17.7	2.85	1.657 mS/cm uS/cm	7.14	-89.9	14.07
1800	1223				18.0	2.56	1.642 mS/cm uS/cm	7.14	-90.7	15.92
2160	1224				18.3	2.32	1.624 mS/cm uS/cm	7.14	-91.3	16.83
2400	1225				18.6	2.14	1.614 mS/cm uS/cm	7.14	-91.7	17.39
2700	1226				18.6	2.04	1.609 mS/cm uS/cm	7.14	-92.0	17.12
3000	1227				18.6	1.96	1.604 mS/cm uS/cm	7.14	-92.3	15.92
3300	1228				18.7	1.88	1.600 mS/cm uS/cm	7.14	-92.5	13.77
3600	1229				18.8	1.84	1.599 mS/cm uS/cm	7.14	-92.7	12.21
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD Angelo 1/6/2020

Start Time: 1217 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1229 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/2020

SAMPLING DATA

Sample Date: 1/6/2020 Sample Time: 1235 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MD BH

COMMENTS:

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

Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/8/20 WEATHER: Clear, 40s

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-010820

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~34.02 ft btoc
Total Well Depth (btoc): 39.27 ft	
Depth to Water (btoc): 24.92 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 14.35 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 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	1254	24.94	Cloudy	Moderate	15.16	4.47	1.039	mS/cm uS/cm	7.12	28.1	65.8
~1500	1259	24.94	Cloudy	Moderate	16.9	0.55	1.065	mS/cm uS/cm	6.78	32.9	54.1
~3000	1304	24.94	Hazy	Moderate	16.4	0.46	1.069	mS/cm uS/cm	6.79	24.5	48.6
~3900	1307	↓	↓	↓	17.2	0.30	1.068	mS/cm uS/cm	6.78	16.8	46.9
~4200	1308				17.2	0.26	1.068	mS/cm uS/cm	6.79	13.8	46.2
~4500	1309				16.6	0.23	1.069	mS/cm uS/cm	6.79	10.9	44.0
~4800	1310				17.0	0.22	1.064	mS/cm uS/cm	6.79	7.7	38.8
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 1254 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1310 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1315 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/7/20 WEATHER: Clear, 30s

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX-010720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~44.61 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 49.86 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 37.67 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): 39.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 12.19 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 TOTAL WELL DEPTH -2 FT: — 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	0953	37.68	Hazy	None	14.3	3.54	1.306 mS/cm uS/cm	6.67	248.0	61.0
~1500	0958	37.68	Hazy	↓	16.4	0.64	1.371 mS/cm uS/cm	6.78	241.7	29.2
~3000	1003	37.68	Clear	↓	16.5	0.52	1.350 mS/cm uS/cm	6.86	234.7	15.5
~3300	1004	37.68	↓	↓	16.5	0.51	1.348 mS/cm uS/cm	6.87	232.9	12.8
~3600	1005	37.68	↓	↓	16.6	0.52	1.343 mS/cm uS/cm	6.87	232.1	12.4
~3900	1006	37.68	↓	↓	16.6	0.51	1.345 mS/cm uS/cm	6.88	231.0	11.3
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 0953 Elapsed Time (min): ~13 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1006 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 Sample Time: 1010 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: JR, BB

COMMENTS:

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

Turbidity started High, watched parameters over 5 min interval for Decrease & Steady Stabilization. + DO

Total Purge Volume: ~3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Berleson

DATE: 1/6/20 WEATHER: Clear 30s

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-ROX-010620

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~40.59 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 45.84 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 32.63 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): 35.59 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 95.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.21 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 TOTAL WELL DEPTH -2 FT: — 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	0956	32.62	Clear	Moderate	14.5	3.90	0.989	mS/cm uS/cm	7.07	175.9	10.2
~300	0957	32.63			15.9	1.57	0.999	mS/cm uS/cm	6.90	175.1	9.6
~600	0958	32.63			16.5	0.84	1.007	mS/cm uS/cm	6.85	173.6	9.1
~900	0959	32.63			16.8	0.57	1.012	mS/cm uS/cm	6.84	172.5	9.6
~1200	1000	32.64			17.0	0.48	1.015	mS/cm uS/cm	6.84	171.7	9.8
~1500	1001	32.64			17.2	0.39	1.018	mS/cm uS/cm	6.84	170.7	9.9
~1800	1002	32.64			17.2	0.32	1.023	mS/cm uS/cm	6.84	169.7	12.1
~2100	1003	32.64			17.4	0.27	1.026	mS/cm uS/cm	6.85	168.1	9.6
~2400	1004	32.64			17.4	0.24	1.028	mS/cm uS/cm	6.85	167.1	9.7
								mS/cm uS/cm			
								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: 0956 Elapsed Time (min): ~~18 min~~ ~8 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1004 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/20 Sample Time: 1005 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW | PROJECT NUMBER: 60619901 - 1.03.004 | FIELD PERSONNEL: J. Rogate, B. Burlegson

DATE: 1/9/20 | WEATHER: Cloudy, 50s

MONITORING WELL ID: MW-26 | SAMPLE ID: MW26-ROX-010920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~43.15 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.40 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.45 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.95 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — 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	1051	35.46	Hazy	None	15.7	5.44	1.514	mS/cm uS/cm	7.30	200.1	28.0
~1500	1056	35.45	↓	↓	17.6	0.91	1.501	mS/cm uS/cm	6.84	195.3	14.6
~3000	1101	35.45			18.2	0.55	1.456	mS/cm uS/cm	6.85	188.5	13.9
~3900	1104	35.45			18.3	0.43	1.438	mS/cm uS/cm	6.85	184.7	15.4
~4200	1105	35.45			18.4	0.41	1.434	mS/cm uS/cm	6.85	183.5	16.7
~4500	1106	35.45			18.4	0.39	1.433	mS/cm uS/cm	6.85	182.4	15.6
~4800	1107	35.45	↓	↓	18.4	0.38	1.430	mS/cm uS/cm	6.85	181.4	15.8
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 1051 | Elapsed Time (min): ~16min | Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1107 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 | Sample Time: 1110 | 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/7/20 WEATHER: Clear, 40s

MONITORING WELL ID: MW-27 SAMPLE ID: MW27-ROX-010720

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		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 36.96 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): — ft			
Depth to Top of Screen (btoc): 39.79 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 13.08 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 TOTAL WELL DEPTH -2 FT: — 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	1135	37.05	Hazy	None	14.2	6.20	0.879	mS/cm uS/cm	7.38	135.7	40.7
~1500	1140	37.08	Cloudy		16.1	4.05	0.876	mS/cm uS/cm	7.03	127.7	68.6
~3000	1145	37.09	Hazy		16.4	3.19	0.884	mS/cm uS/cm	6.97	119.6	31.5
~4500	1150	37.10	Clear		16.4	2.88	0.885	mS/cm uS/cm	6.96	112.5	14.7
~4800	1151	37.10			16.2	2.75	0.884	mS/cm uS/cm	6.95	111.1	12.8
~5100	1152	37.10			16.3	2.77	0.883	mS/cm uS/cm	6.95	110.0	12.9
~5400	1153	37.10	↓	↓	16.5	2.75	0.884	mS/cm uS/cm	6.95	108.7	10.6
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 1135 Elapsed Time (min): ~18 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1153 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 Sample Time: 1155 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~5400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Regate, B. Berleson

DATE: 1/10/20 WEATHER: Rain, 50s

MONITORING WELL ID: MW-28 SAMPLE ID: MW28-ROX-011020

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	
Depth to Water (btoc): 36.55 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~40.21 ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 7.31 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 TOTAL WELL DEPTH -2 FT: — 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	1035	36.60	Cloudy	None	16.0	4.02	2.082 mS/cm uS/cm	6.85	136.0	71.4
~1500	1040	36.61	Hazy	Slight	17.8	0.69	2.155 mS/cm uS/cm	6.56	129.6	28.7
~2400	1045	36.60	↓	↓	18.1	0.33	2.149 mS/cm uS/cm	6.55	120.5	29.2
~3900	1048	36.60			18.1	0.25	2.142 mS/cm uS/cm	6.55	115.3	32.5
~4200	1049	↓			18.0	0.22	2.138 mS/cm uS/cm	6.55	111.6	29.4
~4500	1050				18.1	0.20	2.136 mS/cm uS/cm	6.56	109.0	28.6
~4800	1051				18.2	0.19	2.134 mS/cm uS/cm	6.54	107.8	30.2
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1035 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1051 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/10/20

SAMPLING DATA

Sample Date: 1/10/20 Sample Time: 1055 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 1/7/20 WEATHER: Clear, 30s

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-010720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 63.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.29 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): 38.00 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ~43.00' ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 26.71 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 TOTAL WELL DEPTH -2 FT: — 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	0858	36.29	Clear	None	13.5	6.00	1.295	mS/cm uS/cm	6.23	282.2	5.0
~300	0859	36.29	↓	↓	14.7	4.64	1.205	mS/cm uS/cm	6.45	276.1	3.3
~600	0900	36.28			15.0	4.20	RPT 1.193	mS/cm uS/cm	6.51	272.3	2.8
~2100	0905	36.27			15.6	2.65	1.153	mS/cm uS/cm	6.67	259.6	2.5
~3600	0910	36.27			15.7	2.13	1.133	mS/cm uS/cm	6.73	254.5	2.3
~5100	0915	36.27			15.8	1.92	1.129	mS/cm uS/cm	6.75	253.1	2.2
~5400	0916	36.27			15.8	1.90	1.127	mS/cm uS/cm	6.76	253.1	2.0
~5700	0917	36.27			15.8	1.90	1.126	mS/cm uS/cm	6.76	253.1	2.1
~6000	0918	36.27			15.7	1.88	1.126	mS/cm uS/cm	6.77	253.3	2.0
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0858 Elapsed Time (min): ~20 min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 0918 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 Sample Time: 0920 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~300 QA/QCSamples: P54-ROX-010720-EB @ 0815

VOA Vials, No Headspace ☑ Initials: JR, BB

COMMENTS:

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

DO Decreasing in Excess @ 0900, Watched Parameters Over 5min Interval until Stabilization was More steady.

Total Purge Volume: ~6000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M.D'Angelo B.Howell

DATE: 1/9/20 WEATHER: Overcast 50's

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

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 50.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: ppm
Depth to LNAPL/DNAPL (btoc): ft		
Depth to Top of Screen (btoc): 40.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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)
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

J.D'Angelo 1/9/20

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: NA

COMMENTS:

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

NOT SAMPLED DUE TO PRESCENCE OF LNAPL

Total Purge Volume: NA mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M.DiAngelo B. Howell

DATE: 1/8/20 WEATHER: Sunny 40's

MONITORING WELL ID: P56 SAMPLE ID: P56-ROX-010820

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 65.82 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.31 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 46.31 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Wellbore PID/FID Reading: 111.5 ppm
Depth to Top of Screen (btoc): 40.82 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc	
Screen Length: 25 ft		
Water Column Height (not including NAPL): 24.51 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	1158	41.33	GREY	Moderate HC	17.8	6.63	1.399 mS/cm uS/cm	7.07	-110.2	21.32
300	1159	41.33			17.6	4.73	1.386 mS/cm uS/cm	7.05	-118.8	21.29
600	1200	41.33			17.5	3.82	1.380 mS/cm uS/cm	7.05	-123.5	21.25
2100	1205				17.5	2.27	1.357 mS/cm uS/cm	7.05	-132.0	16.35
2400	1206				17.5	2.10	1.359 mS/cm uS/cm	7.05	-133.3	14.40
2700	1207				17.9	1.96	1.354 mS/cm uS/cm	7.05	-134.4	12.67
3000	1208				18.2	1.85	1.354 mS/cm uS/cm	7.05	-135.5	11.40
3300	1209				17.9	1.75	1.350 mS/cm uS/cm	7.05	-136.2	10.60
3600	1210				17.6	1.69	1.349 mS/cm uS/cm	7.05	-136.5	9.97
3900	1211				17.5	1.63	1.344 mS/cm uS/cm	7.05	-136.9	10.00
4200	1212				18.1	1.56	1.343 mS/cm uS/cm	7.04	-137.6	9.87
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDiAngelo 1/8/20

Start Time: 1158 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1212 Average Purge Rate (mL/min): 300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1215 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M.D'Angelo B.Howell

DATE: 1/9/2020 WEATHER: Light RAIN 50's

MONITORING WELL ID: P-57 SAMPLE ID: P57-ROX-010920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.19 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 54.19 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.77 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 (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 114.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.42 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 TOTAL WELL DEPTH -2 FT: 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	0954	42.24	Clear	SLIGHT HC	17.7	5.68	1.300 ~~mS/cm~~ uS/cm	6.87	-45.6	0.0
300	0955	42.24			17.9	4.56	1.308 ~~mS/cm~~ uS/cm	6.87	-63.6	0.0
600	0956	42.24			18.2	3.65	1.309 ~~mS/cm~~ uS/cm	6.88	-77.9	0.0
2,100	1001				19.4	2.21	1.310 ~~mS/cm~~ uS/cm	6.90	-103.3	0.0
2400	1002				19.8	2.05	1.311 ~~mS/cm~~ uS/cm	6.90	-106.7	0.0
2700	1003				19.7	1.94	1.311 ~~mS/cm~~ uS/cm	6.90	-109.1	0.0
3000	1004				19.9	1.83	1.314 ~~mS/cm~~ uS/cm	6.91	-111.4	0.0
3900	1007				20.3	1.60	1.329 ~~mS/cm~~ uS/cm	6.91	-116.5	0.0
4200	1008				20.2	1.54	1.332 ~~mS/cm~~ uS/cm	6.91	-117.8	0.0
4500	1009				20.2	1.50	1.334 ~~mS/cm~~ uS/cm	6.91	-118.9	0.0
4800	1010				20.0	1.44	1.335 ~~mS/cm~~ uS/cm	6.92	-120.0	0.0
							mS/cm uS/cm			
							mS/cm ~~uS/cm~~			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 1/9/20

Start Time: 0954 Elapsed Time (min): 16 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1010 Average Purge Rate (mL/min): 300 Date Calibrated: 1/9/2020

SAMPLING DATA

Sample Date: 1/9/2020 Sample Time: 1015 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Horsell

DATE: 1/9/20 WEATHER: Overcast 50°s

MONITORING WELL ID: P-58 SAMPLE ID: NA

INITIAL DATA

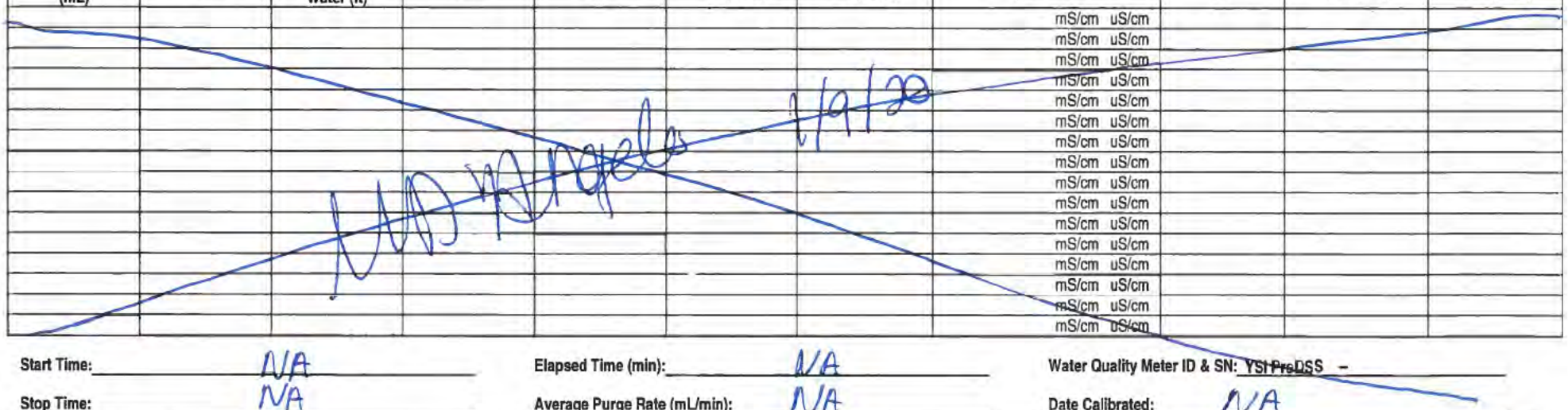
Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 65.21 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN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



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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: NA

COMMENTS:

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

Not Sampled due to presence of LNAPL

Total Purge Volume: mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/9/20 WEATHER: Light RAIN 50's

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-010920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 72.91 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 42.14 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 52.91 ft btoc	Wellbore PID/FID Reading: 292.8 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 30.77 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 TOTAL WELL DEPTH -2 FT: 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	0856	42.15	clear	moderate HC	18.9	5.76	1.471 mS/cm uS/cm	6.44	1.1	1.45
300	0857	42.15			19.1	4.62	1.473 mS/cm uS/cm	6.53	-28.6	0.16
600	0858	42.15			19.5	3.86	1.474 mS/cm uS/cm	6.56	-38.9	0.0
2100	0903				20.8	2.13	1.480 mS/cm uS/cm	6.72	-82.7	0.0
2400	0904				21.1	1.98	1.482 mS/cm uS/cm	6.73	-86.5	0.0
2700	0905				21.1	1.89	1.482 mS/cm uS/cm	6.74	-89.0	0.0
3000	0906				21.2	1.78	1.482 mS/cm uS/cm	6.75	-91.9	0.0
3300	0907				21.1	1.71	1.481 mS/cm uS/cm	6.75	-93.8	0.0
3600	0908				21.0	1.63	1.481 mS/cm uS/cm	6.76	-95.6	0.0
3900	0909				21.0	1.56	1.480 mS/cm uS/cm	6.76	-97.3	0.0
4200	0910				21.1	1.51	1.481 mS/cm uS/cm	6.76	-98.9	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 1/9/2020

Start Time: 0856 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0910 Average Purge Rate (mL/min): 300 Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 Sample Time: 0915 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/7/20 WEATHER: Sunny 40's

MONITORING WELL ID: P-66 SAMPLE ID: P66-ROX-010720

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): 59.72 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 31.09 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): 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): 34.72 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 25 ft	
Water Column Height (not including NAPL): 28.63 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: 72.8 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	1107	31.11	Clear	Slight HC	18.2	6.83	2.239 mS/cm uS/cm	10.74	-91.5	13.07
300	1108	31.10			17.3	5.40	2.245 mS/cm uS/cm	6.75	-100.3	10.45
600	1109	31.10			17.4	4.70	2.255 mS/cm uS/cm	6.75	-104.3	10.01
900	1110	31.10			17.14	4.08	2.254 mS/cm uS/cm	6.75	-107.9	9.45
1200	1111				18.0	3.53	2.255 mS/cm uS/cm	6.75	-111.1	8.97
2700	1116				18.6	2.51	2.268 mS/cm uS/cm	6.75	-118.8	10.61
3000	1117				18.4	2.44	2.276 mS/cm uS/cm	6.75	-119.6	11.08
3300	1118				18.2	2.40	2.264 mS/cm uS/cm	6.75	-120.5	11.75
3600	1119				18.3	2.31	2.269 mS/cm uS/cm	675	-121.2	12.52
							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			

MDAngelo 1/7/2020

Start Time: 1107 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1119 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 Sample Time: 1125 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Bothwell

DATE: 1/9/20 WEATHER: overcast 50's

MONITORING WELL ID: P-68 SAMPLE ID: NA

INITIAL DATA

Well Diameter): 4 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 68.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: ppm
Depth to LNAPL/DNAPL (btoc): ft		
Depth to Top of Screen (btoc): 43.76 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc	

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: NA

COMMENTS:

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

NOT SAMPLED due to presence of LNAPL

Total Purge Volume: mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/8/20 WEATHER: Sunny 40's

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-010820

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): 38.40 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 48.83 ft btoc
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): 43.83 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 25 ft	
Water Column Height (not including NAPL): 30.43 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: 0.0 ppm

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	1313	38.69	cloudy	slight HC	17.6	5.74	0.259 mS/cm uS/cm	7.36	-73.2	10.97
300	1314	38.73			18.3	4.29	0.259 mS/cm uS/cm	7.19	-79.2	9.35
600	1315	38.73			17.8	3.64	0.258 mS/cm uS/cm	7.15	-81.7	8.70
900	1316	38.73			17.9	3.28	0.257 mS/cm uS/cm	7.12	-83.0	8.94
2400	1321				18.2	2.18	0.257 mS/cm uS/cm	7.06	-89.5	8.40
2700	1322				18.2	2.11	0.256 mS/cm uS/cm	7.05	-90.0	7.67
3000	1323				18.2	2.04	0.256 mS/cm uS/cm	7.05	-90.8	6.98
3300	1324				18.2	1.94	0.256 mS/cm uS/cm	7.04	-91.5	6.72
3600	1325				18.2	1.87	0.256 mS/cm uS/cm	7.04	-91.8	6.61
3900	1326				18.1	1.81	0.256 mS/cm uS/cm	7.04	-92.4	6.43
4200	1327				18.0	1.76	0.257 mS/cm uS/cm	7.03	-92.8	6.48
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD Angelo 1/8/20

Start Time: 1313 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1327 Average Purge Rate (mL/min): 300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1330 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/9/20 WEATHER: Overcast 50°s

MONITORING WELL ID: P-93A SAMPLE ID: P93A-ROX-010920

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
Total Well Depth (btoc): 53.07 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 39.89 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): 43.07 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 13.18 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: 1.0 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	1138	39.97	clear	none	20.2	5.10	1.494 mS/cm uS/cm	7.19	-8.0	0.0
300	1139	39.97			20.7	4.17	1.519 mS/cm uS/cm	7.10	-20.5	0.0
600	1140	39.97			21.1	3.26	1.528 mS/cm uS/cm	7.07	-33.3	0.0
2100	1145				21.5	2.05	1.519 mS/cm uS/cm	7.08	-59.7	0.0
2400	1146				21.5	1.96	1.517 mS/cm uS/cm	7.08	-62.6	0.0
2700	1147				21.6	1.84	1.514 mS/cm uS/cm	7.08	-65.1	0.0
3000	1148				21.6	1.76	1.511 mS/cm uS/cm	7.08	-67.3	0.0
3300	1149				21.7	1.69	1.508 mS/cm uS/cm	7.07	-69.1	0.0
3600	1150				21.9	1.62	1.503 mS/cm uS/cm	7.07	-70.9	0.0
3900	1151				22.0	1.57	1.497 mS/cm uS/cm	7.07	-73.7	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD 1/9

D'Angelo 1/9/20

Start Time: 1138 Elapsed Time (min): 123 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1151 Average Purge Rate (mL/min): 300 Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 Sample Time: 1155 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: MD BH

COMMENTS:

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

Total Purge Volume: 3900 mL

LOW FLOW GROUNDW[illegible]R SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M.D'Angelo B. Howell

DATE: 1/8/20 WEATHER: sunny 40's

MONITORING WELL ID: P-93B SAMPLE ID: P93B-ROX-010820

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): 76.78 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 41.48 ft VS MD	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): 74.78 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 74.78 ft btoc
Screen Length: 2 ft	
Water Column Height (not including NAPL): 35.30 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: Dedicated Well Wizard

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	1008		CLEAR	NONE	17.1	3.79	1.718 mS/cm uS/cm	6.73	-90.4	0.0
300	1009				17.3	3.24	1.585 mS/cm uS/cm	6.69	-88.1	0.0
600	1010				17.5	2.98	1.531 mS/cm uS/cm	6.67	-87.1	0.0
900	1011				17.7	2.76	1.510 mS/cm uS/cm	6.66	-86.7	0.0
1200	1012				17.7	2.64	1.499 mS/cm uS/cm	6.66	-86.5	0.0
1500	1013				17.5	2.53	1.491 mS/cm uS/cm	6.66	-86.4	0.0
1800	1014				17.5	2.42	1.483 mS/cm uS/cm	6.65	-86.5	0.0
2100	1015				17.2	2.33	1.477 mS/cm uS/cm	6.66	-86.6	0.0
2400	1016				17.3	2.26	1.473 mS/cm uS/cm	6.65	-86.9	0.0
2700	1017				17.5	2.16	1.485 mS/cm uS/cm	6.63	-87.6	0.33
3000	1018				17.4	2.11	1.515 mS/cm uS/cm	6.65	-88.6	0.67
3300	1019				17.4	2.06	1.557 mS/cm uS/cm	6.66	-91.0	2.23
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

M.D'Angelo 1/8/20

Start Time: 1008 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1019 Average Purge Rate (mL/min): 300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 1025 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: MD BH

COMMENTS:

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

Total Purge Volume: 3300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. D'Angelo B. Howell

DATE: 1/8/20 WEATHER: Sunny 40's

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-010820

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): 97.88 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 41.30 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
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 92.88 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 95.88 ft btoc
Screen Length: 2 ft	
Water Column Height (not including NAPL): 56.58 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

Purge Volume (mL)	Time	Depth to Water (ft)	Color (STABLE: over 3 readings)	Odor (STABLE: over 3 readings)	Temp (°C) (Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0934	41.32	CLEAR	NONE	16.3	8.28	1.325 mS/cm uS/cm	6.40	33.2	1.61
300	0935	41.32			16.3	5.96	1.447 mS/cm uS/cm	6.62	-19.7	0.0
600	0936	41.32			17.0	4.90	1.487 mS/cm uS/cm	6.70	-42.0	0.0
2100	0941				18.0	2.79	1.557 mS/cm uS/cm	6.82	-73.9	0.49
2400	0942				18.0	2.64	1.560 mS/cm uS/cm	6.83	-76.3	0.0
2700	0943				18.0	2.49	1.564 mS/cm uS/cm	6.84	-79.0	0.0
3000	0944				18.0	2.36	1.565 mS/cm uS/cm	6.85	-81.2	0.0
3300	0945				17.8	2.25	1.567 mS/cm uS/cm	6.86	-83.2	0.0
3600	0946				17.8	2.16	1.566 mS/cm uS/cm	6.87	-84.6	0.0
3900	0947				18.1	2.08	1.563 mS/cm uS/cm	6.87	-85.9	0.0
4200	0948				18.2	2.00	1.562 mS/cm uS/cm	6.88	-87.2	0.0
4500	0949				18.3	1.93	1.568 mS/cm uS/cm	6.88	-88.3	0.0
4800	0950				18.5	1.85	1.570 mS/cm uS/cm	6.89	-89.6	0.0
5100	0951				18.2	1.80	1.574 mS/cm uS/cm	6.89	-90.2	0.0
					MDAngelo	1/8/20	mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0934 Elapsed Time (min): 17 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0951 Average Purge Rate (mL/min): 300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 1/8/20 Sample Time: 0955 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 5100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: B. Howell M. D'Angelo

DATE: 1/8/20 WEATHER: sunny 40's

MONITORING WELL ID: P-93D SAMPLE ID: P93D-ROX-010820

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): 41.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 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): 86.32 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 TOTAL WELL DEPTH -2 FT: 126.00 ft btoc		

PURGE DATA

Pump Type: Dedicated Well Wizard

Purge Volume (mL)	Time	Depth to Water (ft) VE MD	Color	Odor VE MD	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	1058	~~CLEAR~~ MD	CLEAR	~~17.9~~ NONE	18.1	7.42	1.734 mS/cm uS/cm	7.29	-71.9	8.0
300	1059				17.9	5.87	1.742 mS/cm uS/cm	7.17	-86.0	8.0
600	1100				17.4	4.90	1.736 mS/cm uS/cm	7.13	-91.6	8.0
2100	1105				16.9	2.73	1.747 mS/cm uS/cm	7.05	-95.7	0.0
2400	1106				17.0	2.51	1.747 mS/cm uS/cm	7.05	-96.2	0.0
2700	1107				17.0	2.42	1.748 mS/cm uS/cm	7.04	-96.6	0.0
3000	1108				17.2	2.24	1.749 mS/cm uS/cm	7.04	-97.3	0.0
3300	1109				17.1	2.08	1.750 mS/cm uS/cm	7.04	-98.1	0.0
3600	1110				17.2	2.05	1.750 mS/cm uS/cm	7.04	-98.4	0.0
3900	1111				17.0	1.94	1.752 mS/cm uS/cm	7.04	-98.9	0.0
4200	1112				17.0	1.90	1.751 mS/cm uS/cm	7.04	-99.2	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

~~MD~~ M. D'Angelo 1/8/20

Start Time: 1058 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1112 Average Purge Rate (mL/min): 300 Date Calibrated: 1/8/20

SAMPLING DATA

Sample Date: 01/08/20 Sample Time: 1120 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MD BH

COMMENTS:

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

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: Mary D'Angelo B. Howell

DATE: 1/6/2020 WEATHER: sunny 40's

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-010620

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	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 33.31 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 22.15 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 23.01 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 1.16 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	0933	22.22	Brown	none	16.6	7.70	1.951 mS/cm uS/cm	6.50	32.7	288.31
3000	0943	22.19			19.6	2.85	2.018 mS/cm uS/cm	7.43	-119.2	193.42
6000	0953	22.21			20.1	3.62	1.957 mS/cm uS/cm	7.36	-99.6	141.71
9000	1003	22.21			20.5	3.23	1.882 mS/cm uS/cm	7.17	-97.9	85.41
12000	1013	22.21			20.8	2.11	1.813 mS/cm uS/cm	7.08	-101.3	49.53
12300	1014				20.3	1.46	1.792 mS/cm uS/cm	7.07	-104.2	44.13
12600	1015				20.3	1.32	1.787 mS/cm uS/cm	7.07	-105.2	47.72
12900	1016				20.3	1.22	1.789 mS/cm uS/cm	7.07	-106.2	46.23
13200	1017				20.3	1.16	1.785 mS/cm uS/cm	7.07	-106.9	42.53
13500	1018				20.4	1.12	1.785 mS/cm uS/cm	7.07	-107.5	41.91
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo 1/6/2020

Start Time: 0933 Elapsed Time (min): 45 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1018 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/20

SAMPLING DATA

Sample Date: 1/6/2020 Sample Time: 1020 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

DUE to high turbidity, readings taken at longer intervals

Total Purge Volume: 13500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Rayatz, B. Burleson

DATE: 1/9/20 WEATHER: Cloudy, 50s

MONITORING WELL ID: ROST-3-MW SAMPLE ID: ROST3MW-ROX-010920

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	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.06 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.56 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 37.81 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 258.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.50 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
	STABLE: (over 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	0958	36.62	Cloudy	None	13.8	5.48	1.879 mS/cm uS/cm	6.75	212.2	81.6
~1500	1003	36.60	Hazy	None	16.7	1.01	1.997 mS/cm uS/cm	6.44	214.5	45.4
~3000	1008	36.60	Hazy	Slight	17.3	0.41	2.023 mS/cm uS/cm	6.45	214.1	23.1
~3900	1011	36.60	Hazy		17.4	0.30	2.033 mS/cm uS/cm	6.45	213.5	15.5
~4200	1012	36.60	↓	↓	17.2	0.27	2.038 mS/cm uS/cm	6.46	213.6	13.1
~4500	1013	36.60			17.4	0.25	2.038 mS/cm uS/cm	6.46	213.4	11.9
~4800	1014	36.60			17.4	0.23	2.042 mS/cm uS/cm	6.46	213.5	10.4
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0958 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1014 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/20 Sample Time: 1015 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW | PROJECT NUMBER: 60619901 - 1.03.004 | FIELD PERSONNEL: M.D'Angelo B.Howell

DATE: 1/7/20 | WEATHER: Sunny 40's

MONITORING WELL ID: ROST-4-PZ(C) | SAMPLE ID: ROST4PZC-ROX-010720

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 45.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.075 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 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 TOTAL WELL DEPTH -2 FT: 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	1319	37.01	light grey	NONE	14.7	7.98	2.050 ~~mS/cm~~ uS/cm	7.28	-59.9	30.85
300	1320	37.01			16.0	3.26	2.081 ~~mS/cm~~ uS/cm	7.21	-83.6	30.51
1800	1325	37.01			17.3	2.58	2.075 ~~mS/cm~~ uS/cm	7.14	-106.6	23.11
2100	1326				17.5	2.41	2.067 ~~mS/cm~~ uS/cm	7.11	-108.3	18.68
2400	1327				17.6	2.25	2.064 ~~mS/cm~~ uS/cm	7.08	-109.2	14.30
2700	1328				17.6	2.10	2.058 ~~mS/cm~~ uS/cm	7.05	-109.5	10.18
3000	1329				17.8	2.00	2.060 ~~mS/cm~~ uS/cm	7.03	-109.6	7.54
3300	1330				17.8	1.89	2.060 ~~mS/cm~~ uS/cm	7.01	-109.3	4.64
3600	1331				17.7	1.83	2.061 ~~mS/cm~~ uS/cm	7.00	-108.9	2.56
3900	1332				17.8	1.76	2.063 ~~mS/cm~~ uS/cm	6.98	-108.4	1.75
4200	1333				17.9	1.70	2.062 ~~mS/cm~~ uS/cm	6.97	-108.1	0.0
							mS/cm uS/cm			
							~~mS/cm~~ uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo 1/7/20

Start Time: 1319 | Elapsed Time (min): 14 | Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1333 | Average Purge Rate (mL/min): 300 | Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 | Sample Time: 1335 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] | Initials: MD BH

COMMENTS:

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

WATER has dark tea color MD 1/7/20 again as last quarter

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW | PROJECT NUMBER: 60619901 - 1.03.004 | FIELD PERSONNEL: M.D'Angelo B. Howell

DATE: 1/7/20 | WEATHER: Sunny 40's

MONITORING WELL ID: ROST-4-PZ(E) | SAMPLE ID: ROST4PZE-ROX-01720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 45.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.10 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.55 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.75 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 8.9 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 TOTAL WELL DEPTH -2 FT: 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	1354	36.15	light grey	moderate HC	16.4	5.99	2.449 ~~mS/cm~~ uS/cm	7.06	-105.8	95.73
1500	1359	36.13			18.1	3.26	2.473 ~~mS/cm~~ uS/cm	7.00	-111.0	87.85
3000	1404	36.13			18.5	1.83	2.470 ~~mS/cm~~ uS/cm	7.00	-121.2	55.21
3300	1405	36.13			18.7	1.70	2.466 ~~mS/cm~~ uS/cm	7.00	-122.0	47.03
3600	1406				18.8	1.62	2.464 ~~mS/cm~~ uS/cm	7.00	-122.2	44.22
3900	1407				19.0	1.54	2.461 ~~mS/cm~~ uS/cm	7.00	-122.3	38.67
4200	1408				19.1	1.47	2.457 ~~mS/cm~~ uS/cm	7.01	-122.1	35.21
4500	1409				19.1	1.42	2.451 ~~mS/cm~~ uS/cm	7.01	-122.6	31.42
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo 1/7/2020

Start Time: 1354 | Elapsed Time (min): 15 | Water Quality Meter ID & SN: YSI ProDSS - 16D101603

Stop Time: 1409 | Average Purge Rate (mL/min): 300 | Date Calibrated: 1/7/20

SAMPLING DATA

Sample Date: 1/7/20 | Sample Time: 1415 | Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

a lot of floating particulate matter in water in flow thru cell

Total Purge Volume: 4500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: J. Baggatz, B. Burleson

DATE: 1/13/20 WEATHER: Cloudy, 30s

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG-ROX-011320

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 44.53 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.07 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~40.80' ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 34.28 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.46 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: 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	1056	37.12	Hazy	Strong	14.5	5.17	1.806 mS/cm uS/cm	6.38	252.7	46.6
~1500	1101		Hazy Grey		16.9	0.71	1.490 mS/cm uS/cm	6.59	236.1	31.2
~3000	1106				16.4	0.36	1.544 mS/cm uS/cm	6.70	226.9	20.6
~3500	1109				16.7	0.33	1.590 mS/cm uS/cm	6.73	220.6	20.5
~4200	1110				17.1	0.29	1.627 mS/cm uS/cm	6.75	216.4	20.6
~4500	1111				17.5	0.27	1.649 mS/cm uS/cm	6.76	214.0	20.4
~4800	1112				17.7	0.26	1.661 mS/cm uS/cm	6.77	212.5	20.6
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 1056 Elapsed Time (min): ~16min Water Quality Meter ID & SN: YSI ProDSS - 18C101072

Stop Time: 1112 Average Purge Rate (mL/min): ~300 Date Calibrated: 1/13/20

SAMPLING DATA

Sample Date: 1/13/2020 Sample Time: 1115 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: JR, BB

COMMENTS:

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

Total Purge Volume: ~4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q20 GW PROJECT NUMBER: 60619901 - 1.03.004 FIELD PERSONNEL: M. DiAngelo B. Howell

DATE: 1/9/2020 WEATHER: Overcast 50's

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-010920

INITIAL DATA

Well Diameter): 6 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 72.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 40.17 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
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): 46.83 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 26 ft	
Water Column Height (not including NAPL): 32.66 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: 4.8 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	1045	40.21	clear	slight HC	18.8	6.57	1.870 (mS/cm) uS/cm	6.87	-36.4	0.60
300	1046	40.21			18.9	5.44	1.883 (mS/cm) uS/cm	6.86	-52.5	0.69
1800	1051	40.21			19.5	2.50	1.903 (mS/cm) uS/cm	6.87	-100.5	0.0
2100	1052				19.2	2.29	1.903 (mS/cm) uS/cm	6.87	-103.9	0.01
2400	1053				19.1	2.12	1.902 (mS/cm) uS/cm	6.87	-106.5	0.0
2700	1054				19.2	1.99	1.903 (mS/cm) uS/cm	6.87	-108.7	0.0
3000	1055				19.2	1.90	1.904 (mS/cm) uS/cm	6.88	-110.2	0.0
3300	1056				19.2	1.80	1.904 (mS/cm) uS/cm	6.88	-111.6	0.0
3600	1057				19.1	1.72	1.905 (mS/cm) uS/cm	6.88	-112.8	0.0
3900	1058				19.1	1.65	1.905 (mS/cm) uS/cm	6.88	-114.0	0.0
4200	1059				19.0	1.58	1.905 (mS/cm) uS/cm	6.88	-115.0	0.15
4500	1100				19.1	1.53	1.905 (mS/cm) uS/cm	6.88	-115.9	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

M. DiAngelo 1/9/20

Start Time: 1045 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1100 Average Purge Rate (mL/min): 300 Date Calibrated: 1/9/20

SAMPLING DATA

Sample Date: 1/9/2020 Sample Time: 1105 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 4500 mL

Appendix B

Data Review/Validation Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182185-1-Rev. 2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 2/28/2020

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

Sample Identification	Sample Identification
TB-ROX-010620-8260-A	TB-ROX-010620-8011-A
MW4-ROX-010620-EB	MW4-ROX-010620
MW25-ROX-010620	MW8-ROX-010620
MW7-ROX-010620	MW7-ROX-010620-Dup
TB-ROX-010620-8260-B	TB-ROX-010620-8011-B
P114R-ROX-010620-EB	P114R-ROX-010620
MW13-ROX-010620	MW22-ROX-010620
MW5-ROX-010620	

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, laboratory case narrative indicated pentachlorophenol was re-extracted outside of the extraction holding time criteria in several samples. 2-Methylnaphthalene was detected in the equipment blank P114R-ROX-010620-EB. Several VOC, SVOC, and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in several samples. Sample MW8-ROX-010620 and field duplicate pair MW7-ROX-010620/MW7-ROX-010620-Dup were diluted to bring VOCs and phenol into calibration range of the instrument. The continuing calibration verifications for bromomethane, hexachlorocyclopentadiene, and quinoline were outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised to include re-analysis, or re-extraction and re-analysis of pentachlorophenol in several samples.

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, pentachlorophenol was re-extracted 24 days outside of the extraction holding time criteria (7 days) in several samples due to results that were not consistent with the

historical. Professional judgement was used to qualify as estimated (**UJ/J**); however, not reject the out of holding time data. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-010620-RERA	SVOCs	Pentachlorophenol	**J**
MW22-ROX-010620-RERA	SVOCs	Pentachlorophenol	**UJ**

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
P114R-ROX-010620-EB	PAHs	2-Methylnaphthalene	0.019 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 400-473519/1002	VOCs	2-Butanone (MEK)	**60**	NA	61-145
LCS 400-473519/1002	VOCs	1-Chlorohexane	**135**	NA	69-130
LCS/LCSD 400-473251/2-A/3-A	SVOCs	Benzoic acid	**3**/**3**	11	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	NA/**155**	5	39-135/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	4,6-Dinitro-ortho-cresol	14/104	**152**	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	2,4-Dinitrophenol	**5**/75	**175**	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	13/33	**88**	10-129/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	2-Nitrophenol	50/84	**50**	28-136/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	4-Nitrophenol	**8**/98	**170**	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	Pentachlorophenol	29/83	**97**	15-141/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	2,4,6-Trichlorophenol	59/83	**34**	36-139/30
LCS/LCSD 400-473251/4-A/5-A	SVOCs	Benzenethiol	**3**/13	**124**	10-120/30

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-473412/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**161**/121	28	60-140/30
LCS/LCSD 400-473412/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	139/96	**37**	60-140/30
LCS/LCSD 400-473543/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**205/204**	1	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. Equipment blanks MW4-ROX-010620-EB and P114R-ROX-01620-EB were associated with LCS recovery for 2-butanone (60%) below evaluation criteria (61-145). Equipment blanks are quality control samples and do 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-010620	SVOCs	Benzenethiol	**UJ**
MW4-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW4-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW4-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW25-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW25-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW25-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW25-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW8-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW8-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW8-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW8-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW7-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW7-ROX-010620	SVOCs	Benzoic acid	**J**
MW7-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW7-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW7-ROX-010620-Dup	SVOCs	Benzenethiol	**UJ**
MW7-ROX-010620-Dup	SVOCs	Benzoic acid	**J**
MW7-ROX-010620-Dup	SVOCs	2,4-Dinitrophenol	**UJ**
MW7-ROX-010620-Dup	SVOCs	4-Nitrophenol	**UJ**
P114R-ROX-010620	SVOCs	Benzenethiol	**UJ**
P114R-ROX-010620	SVOCs	Benzoic acid	**UJ**
P114R-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
P114R-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW13-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW13-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW13-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW22-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW22-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW22-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW22-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW5-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW5-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW5-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW5-ROX-010620	SVOCs	4-Nitrophenol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW25-ROX-010620	SVOCs	Terphenyl-d_{14}	**51**	53-125
P114R-ROX-010620	SVOCs	Terphenyl-d_{14}	**50**	53-125
P114R-ROX-010620-RERA	SVOCs	Terphenyl-d_{14}	**50**	53-125
MW22-ROX-010620-RERA	SVOCs	Terphenyl-d_{14}	**46**	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. 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
MW7-ROX-010620	MW7-ROX-010620-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 verifications for bromomethane, hexachlorocyclopentadiene, and quinoline were outside acceptance criteria, biased low, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-010620	VOCs	Bromomethane	**UJ**
MW4-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW4-ROX-010620	SVOCs	Quinoline	**UJ**
MW25-ROX-010620	VOCs	Bromomethane	**UJ**
MW25-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW25-ROX-010620	SVOCs	Quinoline	**UJ**
MW8-ROX-010620	VOCs	Bromomethane	**UJ**
MW8-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW8-ROX-010620	SVOCs	Quinoline	**UJ**
MW7-ROX-010620	VOCs	Bromomethane	**UJ**
MW7-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW7-ROX-010620	SVOCs	Quinoline	**UJ**
MW7-ROX-010620-Dup	VOCs	Bromomethane	**UJ**
MW7-ROX-010620-Dup	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW7-ROX-010620-Dup	SVOCs	Quinoline	**UJ**
P114R-ROX-010620	VOCs	Bromomethane	**UJ**
P114R-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
P114R-ROX-010620	SVOCs	Quinoline	**UJ**
MW13-ROX-010620	VOCs	Bromomethane	**UJ**
MW13-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW13-ROX-010620	SVOCs	Quinoline	**UJ**
MW22-ROX-010620	VOCs	Bromomethane	**UJ**
MW22-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW22-ROX-010620	SVOCs	Quinoline	**UJ**
MW5-ROX-010620	VOCs	Bromomethane	**UJ**
MW5-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW5-ROX-010620	SVOCs	Quinoline	**UJ**

1.0 VALIDATION OF DBCP AND EDB DATA – SDG 400-182185-1-R2

This section describes the validation for eight investigative groundwater samples, one field duplicate sample, two equipment blanks, and two trip blanks that were prepared and analyzed for 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by USEPA SW-846 Method 8011. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-182185-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010620-8011-A	MW4-ROX-010620-EB
MW4-ROX-010620	MW25-ROX-010620
MW8-ROX-010620	MW7-ROX-010620
MW7-ROX-010620-DUP	TB-ROX-010620-8011-B
P114R-ROX-010620-EB	P114R-ROX-010620
MW13-ROX-010620	MW22-ROX-010620
MW5-ROX-010620	--

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2017).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results of each analyte requested for each field sample submitted in the analytical batch, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that LCS/LCSD recoveries and LCS/LCSD RPD were outside evaluation criteria. This issue is discussed further in section 1.7 of this validation report.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, the raw data forms, and the chromatograms for accuracy, consistency, and holding time compliance. The samples were received in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection. No qualifications to the data were required based on holding times and sample preservation.

1.4 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for EDB/DBCP analyses. Validated samples included in SDG 400-182185-1-R2 were analyzed using instrument Yeti. The ICAL for instrument Yeti was established on 1/10/2020. At least five standard concentrations were used to establish the ICAL curve as required by Method 8011.

Review of the ICAL summary forms indicated percent relative standard deviations (%RSDs) were ≤ 15% for target analytes or were determined using least square linear regression and correlation coefficients (r) were greater than 0.990. A recalculation of the %RSDs was performed from the raw data and no errors in calculation were noted; therefore, no qualification of data was required.

Review of the sample chromatograms indicated that an initial calibration verification (ICV) was performed following the initial calibration. Review of ICV summary forms indicated percent difference (%D) ≤ 30% for target analytes were within evaluation criteria. No qualification of data was required.

Recalculation of the percent recoveries was completed, and no errors in calculation were noted.

1.5 Calibration Verification

Review of the sample chromatograms indicated that all CVs were performed before the start of sample analysis, every ten sample injections, and at the end of sample analysis. %Ds met the evaluation criteria of ≤ 30% for target analytes. No qualification of data was required.

Recalculations of the %Ds for target compounds were completed for each CV, and no errors in calculation were noted; therefore, no qualifications of data were required.

1.6 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8011. Also, trip blanks were analyzed to evaluate the existence and magnitude of contamination problems emanating from sample shipment to the laboratory. Equipment blank samples were used to

evaluate the efficiency of the decontamination of sampling equipment. Target compounds were reported as non-detect. No qualification of data was required.

1.7 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation criteria with the exceptions summarized in the table below.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-473412/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**161**/121	28	60-140/30
LCS/LCSD 400-473412/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	139/96	**37**	60-140/30
LCS/LCSD 400-473543/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**205/204**	1	60-140/30

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Analytical data associated with RPD alone outside evaluation criteria did not require qualification. No qualification of data was required.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.8 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples. No qualification of data was required.

Approximately 10% of the recoveries were recalculated and no calculation or transcription errors were noted.

1.9 Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD samples are analyzed to assess potential matrix effects. The validated samples in this SDG were not chosen

1.10 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Approximately 10% of the detected target analytes were verified. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, the matrix spike results were recalculated from the raw data since all target analytes were non-detect, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required and review of the data indicated the correct RLs were reported.

1.11 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS, MS/MSD and surrogate data were achieved for this SDG.

1.0 VALIDATION OF VOC DATA – SDG 400-182185-1-R2

This section describes the validation for eight investigative groundwater samples, one field duplicate, two equipment blanks, and two trip blanks which were prepared by USEPA SW-846 Method 5030B and analyzed for Volatile Organic Compounds (VOCs) by USEPA SW-846 Method 8260B. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-182185-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010620-8260-A	MW4-ROX-010620-EB
MW4-ROX-010620	MW25-ROX-010620
MW8-ROX-010620	MW7-ROX-010620
MW7-ROX-010620-DUP	TB-ROX-010620-8260-B
P114R-ROX-010620-EB	P114R-ROX-010620
MW13-ROX-010620	MW22-ROX-010620
MW5-ROX-010620	--

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2017).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain that it contained the data contractually required in the deliverable. This included checking the data package for the results of each analyte requested for each field sample submitted in the analytical batch, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that VOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. This issue is discussed further in section 1.10 of this validation report. VOCs in sample MW8-ROX-010620 and field duplicate pair MW7-ROX-010620/MW7-ROX-010620-Dup were diluted to bring VOCs and phenol into calibration range of the instrument. The continuing calibration verification for bromomethane was outside acceptance criteria, biased low. Additionally, the laboratory case narrative indicated three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any issues.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, the raw data forms, and the chromatograms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection at a pH < 2.0. No qualifications to the data were required based on holding times and sample preservation.

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against criteria established in USEPA SW-846 Method 8260.

Based on the summary forms, the ion abundance criteria were within evaluation criteria for all masses. No qualifications to the data were required based on instrument performance criteria.

1.5 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for volatiles analyses. Validated samples included in SDG 400-182185-1-R2 were analyzed using instrument Darwin. The ICAL for instrument Darwin was established on 9/10/2019. At least five standard concentrations were used to establish the ICAL curves as required by Method 8260B.

The ICAL response factors (RFs) were reviewed and were greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, 0.30 for 1,1,2,2-tetrachloroethane, and greater than National Functional Guideline (NFG) specified minimum RRFs for all other target analytes. No qualification of data was required.

Review of the initial calibration summary forms indicated %RSDs were $\leq$ 30% for calibration check compounds (CCCs) [1,1-dichloroethene, toluene, chloroform, ethylbenzene, 1,2-dichloropropane, and vinyl chloride], and $\leq$ 15% for non-CCCs.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within criteria specified in NFG (2017).

A recalculation of the %RSDs and RFs for a compound associated with each internal standard was performed from the raw data and no errors in calculation were noted; therefore, no qualification of data was required.

1.6 Calibration Verification

Review of the sample chromatograms indicated that all calibration verifications (CVs) were performed before the start of sample analysis. Review of CV summary forms indicated RFs met the evaluation criteria of greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, 0.30 for 1,1,2,2-tetrachloroethane, and greater than 2017 NFG specified minimum RRFs for all other target analytes. No qualification of data was required.

Percent difference (%D) values were within criteria specified in NFG (2017) except for bromomethane (-55.9% and -50.9%, respectively).

Data that required qualification based on CCV recoveries outside evaluation criteria are summarized in the table below.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-010620	VOCs	Bromomethane	**UJ**
MW25-ROX-010620	VOCs	Bromomethane	**UJ**
MW8-ROX-010620	VOCs	Bromomethane	**UJ**
MW7-ROX-010620	VOCs	Bromomethane	**UJ**
MW7-ROX-010620-Dup	VOCs	Bromomethane	**UJ**
P114R-ROX-010620	VOCs	Bromomethane	**UJ**
MW13-ROX-010620	VOCs	Bromomethane	**UJ**
MW22-ROX-010620	VOCs	Bromomethane	**UJ**
MW5-ROX-010620	VOCs	Bromomethane	**UJ**

Recalculations of the RFs and %Ds for two target compounds were completed for each CV, and no errors in calculation were noted; therefore, no qualifications of data were required.

1.7 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8260B. The purpose of trip blank samples is to evaluate the existence and magnitude of contamination emanating from field and transport activities. The purpose of equipment blank samples is to evaluate the existence and magnitude of contamination emanating from field activities. Target compounds were reported as non-detect. No qualification of data was required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation criteria with the exceptions summarized in the following table.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-473519/1002	VOCs	2-Butanone (MEK)	**60**	NA	61-145

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-473519/1002	VOCs	1-Chlorohexane	**135**	NA	69-130

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks MW4-ROX-010620-EB and P114R-ROX-01620-EB were associated with LCS recovery for 2-butanone (60%) below evaluation criteria (61-145). Equipment blanks are quality control samples and do not require qualification. No qualification of data was required.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted. No qualification of data was required.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. All surrogate recoveries were within the method acceptance criteria for the validated samples. Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD samples are analyzed to assess potential matrix effects. The validated samples in this SDG were not chosen for a MS/MSD.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. IS areas must be within -50% to +100%, and the IS retention times must be within 30 seconds of the IS continuing calibration retention time. IS areas and retention times for the validated samples in this SDG were within evaluation criteria.

The summary forms versus the raw data were verified and no transcription errors were noted. No qualification of data was required.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Approximately 10% of the detected target analytes were recalculated and verified. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, approximately 10% of the detected target analytes were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS and surrogate data were achieved for this SDG.

1.0 VALIDATION OF SVOC DATA – SDG 400-182185-1-R2

This section describes the validation for eight investigative groundwater samples, one field duplicate, and two equipment blanks which were prepared by USEPA SW-846 Method 3520C and analyzed for Semi-Volatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270D and for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270D Low Level. Samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of sample delivery group (SDG) 400-182185-1-R2. Samples included as part of this validation are listed below:

Sample Identification	Sample Identification
MW4-ROX-010620-EB	MW4-ROX-010620
MW25-ROX-010620	MW8-ROX-010620
MW7-ROX-010620	MW7-ROX-010620-DUP
P114R-ROX-010620-EB	P114R-ROX-010620
MW13-ROX-010620	MW22-ROX-010620
MW5-ROX-010620	--

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2017).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control sample (LCS)
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standard areas
- Target compound identification and quantitation
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results of each analyte requested for each field sample submitted in the analytical batch, along with requested QC documentation for the respective methods. The data package was complete.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated pentachlorophenol was re-extracted outside of the extraction holding time criteria in several samples. 2-Methylnaphthalene was detected in the equipment blank P114R-ROX-010620-EB. Several SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in several samples. Sample MW8-ROX-010620 and field duplicate pair MW7-ROX-010620/MW7-ROX-010620-Dup were diluted to bring phenol into calibration range of the instrument. The continuing calibration verifications for hexachlorocyclopentadiene and quinoline were outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised to include re-analysis, or re-extraction and re-analysis of pentachlorophenol in several samples.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the chain-of-custody, the summary forms, the raw data forms, and the chromatograms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC, and were extracted within seven days of collection and analyzed within 40 days of extraction,

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against the laboratory tuning criteria established in Method 8270D.

Based on the raw data, the ion abundance criteria were within evaluation criteria for all masses, therefore; no qualification of the data was required. The raw data forms were checked against the summary forms and no calculation or transcription errors were noted.

1.5 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for semi-volatile analysis. SVOC samples as part of SDG 400-182185-1-R2 were analyzed using instruments Pigpen, Snoopy, and Woodstock PAH samples were analyzed using instruments Chuck and Sally. The ICALs for instruments Pigpen, Snoopy, Peanuts, Chuck, and Sally were established on 1/16/2020, 12/6/2019, 1/9/2020, 11/4/2019, 11/5/2019 respectively. ICALs for instruments Pigpen, Snoopy, Woodstock, Chuck, and Sally were established prior to sample analysis and using at least five concentration standards to establish the initial calibration curve as required by Method 8270D and 8270D Low Level. An average response factor (RF) was determined for each target analyte, and the RFs were reviewed and verified as greater than the minimum RF as specified in NFG 2017 for all target analytes.

Review of the initial calibration summary forms for SVOCs and PAHs indicated target compounds had percent relative standard deviations (%RSDs) $\leq$ the maximum RSD specified in NFG 2017 for target analytes or closely analogous compounds. Least square linear regression was applied to data for target analytes with %RSDs greater than 15% and the resulting correlation coefficients (r) were greater than 0.990.

Initial calibration verifications (ICVs) for SVOCs and PAHs were analyzed following the initial calibrations. Percent difference (%D) values comparing ICV RF to the average ICAL RFs were less than those specified in NFG (2017) or were > 20% for target, or closely analogous, compounds except for benzoic acid (73.3%). Data associated with ICV %D above evaluation criteria indicating a possible high bias were non-detect and did not require qualification. No qualification of data was required.

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.6 Calibration Verification

Review of sample chromatograms indicated the CVs were performed prior to sample analysis. Review of continuing calibration summary forms for SVOCs and PAHs indicated all RFs met the evaluation criteria of greater than the NFG (2017) specified minimum RF for all target analytes. In addition, %Ds met the evaluation criteria of less than or equal to those specified in NFG (2017) for target, or closely analgous, compounds with the exceptions summarized in the table below.

CV (Date/Time)	Analyte	%D
CCVIS 400-473656/3 01/10/2020 14:38	Hexachlorocyclopentadiene	-40.2
CCVIS 400-473656/5 01/10/220 15:27	Quinoline	-21.8
CCVIS 400-473559/2 01/10/2020 15:04	Dibenz(a,h)anthracene	46.3
CCVIS 400-473559/2 01/10/2020 15:04	Indeno[1,2,3-cd] pyrene	36.6
CCVIS 400-473559/2 01/10/2020 15:04	Benzo[g,h,i]perylene	29.2
CCVIS 400-473827/2 01/13/2020 16:35	Dibenz(a,h)anthracene	46.0
CCVIS 400-473827/2 01/13/2020 16:35	Indeno[1,2,3-cd] pyrene	39.5
CCVIS 400-473827/2 01/13/2020 16:35	Benzo[g,h,i]perylene	30.1
CCVIS 400-473920/2 01/14/2020 10:00	1-Methylnaphthalene	24.5
CCVIS 400-473920/2 01/14/2020 10:00	Fluorene	25.9
CCVIS 400-473920/2 01/14/2020 10:00	Dibenz(a,h)anthracene	44.8
CCVIS 400-473920/2 01/14/2020 10:00	Indeno[1,2,3-cd] pyrene	31.7

Analytical data that required qualification based on CV %D data are included in the table below. The results for the validated samples associated with increases in response factors and calculated as positive %D, indicating a potential high bias, were non-detect and were not qualified.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW4-ROX-010620	SVOCs	Quinoline	**UJ**
MW25-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW25-ROX-010620	SVOCs	Quinoline	**UJ**
MW8-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW8-ROX-010620	SVOCs	Quinoline	**UJ**
MW7-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW7-ROX-010620	SVOCs	Quinoline	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-010620-Dup	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW7-ROX-010620-Dup	SVOCs	Quinoline	**UJ**
P114R-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
P114R-ROX-010620	SVOCs	Quinoline	**UJ**
MW13-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW13-ROX-010620	SVOCs	Quinoline	**UJ**
MW22-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW22-ROX-010620	SVOCs	Quinoline	**UJ**
MW5-ROX-010620	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW5-ROX-010620	SVOCs	Quinoline	**UJ**

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8270D. Target compounds in the method blank were reported as non-detect with the exceptions summarized in the table below. An equipment blank sample was analyzed to evaluate contamination problems emanating from field or laboratory activities. Target compounds were reported as non-detect with the exception summarized in the table below.

Blank ID	Parameter	Analyte	Concentration/ Amount
P114R-ROX-010620-EB	PAHs	2-Methylnaphthalene	0.019 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.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS/LCSD recoveries and LCS/LCSD RPDs were within evaluation criteria with the exception summarized in the table below.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-473251/2-A/3-A	SVOCs	Benzoic acid	**3**/3	11	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	NA/**155**	5	39-135/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	4,6-Dinitro-ortho-cresol	14/104	**152**	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	2,4-Dinitrophenol	**5**/75	**175**	10-150/30

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-473251/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	13/33	**88**	10-129/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	2-Nitrophenol	50/84	**50**	28-136/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	4-Nitrophenol	**8**/98	**170**	10-150/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	Pentachlorophenol	29/83	**97**	15-141/30
LCS/LCSD 400-473251/2-A/3-A	SVOCs	2,4,6-Trichlorophenol	59/83	**34**	36-139/30
LCS/LCSD 400-473251/4-A/5-A	SVOCs	Benzenethiol	**3**/13	**124**	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. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW4-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW4-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW4-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW25-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW25-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW25-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW25-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW8-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW8-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW8-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW8-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW7-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW7-ROX-010620	SVOCs	Benzoic acid	**J**
MW7-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW7-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW7-ROX-010620-Dup	SVOCs	Benzenethiol	**UJ**
MW7-ROX-010620-Dup	SVOCs	Benzoic acid	**J**
MW7-ROX-010620-Dup	SVOCs	2,4-Dinitrophenol	**UJ**
MW7-ROX-010620-Dup	SVOCs	4-Nitrophenol	**UJ**
P114R-ROX-010620	SVOCs	Benzenethiol	**UJ**
P114R-ROX-010620	SVOCs	Benzoic acid	**UJ**
P114R-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
P114R-ROX-010620	SVOCs	4-Nitrophenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW13-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW13-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW13-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW22-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW22-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW22-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW22-ROX-010620	SVOCs	4-Nitrophenol	**UJ**
MW5-ROX-010620	SVOCs	Benzenethiol	**UJ**
MW5-ROX-010620	SVOCs	Benzoic acid	**UJ**
MW5-ROX-010620	SVOCs	2,4-Dinitrophenol	**UJ**
MW5-ROX-010620	SVOCs	4-Nitrophenol	**UJ**

Approximately 10% of the laboratory control spike recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per-sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples with the exceptions summarized in the table below.

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW25-ROX-010620	SVOCs	Terphenyl-d_{14}	**51**	53-125
P114R-ROX-010620	SVOCs	Terphenyl-d_{14}	**50**	53-125
P114R-ROX-010620-RERA	SVOCs	Terphenyl-d_{14}	**50**	53-125
MW22-ROX-010620-RERA	SVOCs	Terphenyl-d_{14}	**46**	53-125

Qualifications due to surrogate recoveries were not required if either only one of three base/neutral fraction or one of three acid fraction surrogate recoveries were outside evaluation criteria in the associated SVOC samples. No qualification of data was required.

Approximately 10% of the recoveries were recalculated and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD samples are analyzed to assess potential matrix effects. The validated samples in this SDG were not chosen for a MS/MSD.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. Following Method 8270C, the IS areas for the samples and CVs must be within –50% to +100% and retention times must be within 30 seconds of the IS area and retention time of the midpoint of the ICAL.

The IS areas for the CVs and the validated samples in this SDG were within evaluation criteria. No qualification of data was required.

Approximately 10% of the spiking compound recoveries for the LCS were recalculated from the raw data and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, the spectra of the identified compounds were verified against the library spectra, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. A minimum of 10% of the detected target analytes and spiking compounds were verified. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, 10% of the target analytes were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS/LCSD and surrogate data were achieved for this SDG.

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ANALYTICAL REPORT

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Laboratory Job ID: 400-182185-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 2

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Reviewed 2/28/20
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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Case Narrative

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

Job ID: 400-182185-1

Job ID: 400-182185-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-182185-1

Comments
021920 Revised Report to include pentachlorophenol results originally reported for samples -4, -6, -7, and -8; both original and re-analysis results are reported. This report replaces the report previously issued on 020720.

020720 Revised Report to correct pentachlorophenol results on samples -4, -6, -7, and -8 after re-analysis and to provide secondary results for samples -12 and -14 after re-extraction and re-analysis out of hold time. This report replaces the report previously issued on 012420.

Receipt
The samples were received on 1/7/2020 8:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.0° C, 0.0° C, 0.0° C and 1.7° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-473366 recovered outside acceptance criteria, low biased, for Bromomethane. 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 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW8-ROX-010620 (400-182185-6), MW7-ROX-010620 (400-182185-7) and MW7-ROX-010620-DUP (400-182185-8). 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-010620-8260-A (400-182185-1), MW4-ROX-010620-EB (400-182185-3), MW4-ROX-010620 (400-182185-4), MW25-ROX-010620 (400-182185-5), MW8-ROX-010620 (400-182185-6), MW7-ROX-010620 (400-182185-7), MW7-ROX-010620-DUP (400-182185-8), TB-ROX-010620-8260-B (400-182185-9), P114R-ROX-010620-EB (400-182185-11), P114R-ROX-010620 (400-182185-12), MW13-ROX-010620 (400-182185-13), MW22-ROX-010620 (400-182185-14) and MW5-ROX-010620 (400-182185-15). The requested target analyte list includes 2-Chloroethyl vinyl ether Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260B: The following analyte recovered outside control limits for the LCS associated with analytical batch 400-473519: 2-Butanone (MEK). This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-473519 recovered outside control limits for the following analyte: 1-Chlorohexane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-473519 recovered outside acceptance criteria, low biased, for Bromomethane. 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.

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 initial calibration verification (ICV) analyzed in batch 400-469009 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-473251 and analytical batch 400-473656 recovered outside control limits for the following analyte(s): Benzoic acid. Benzoic acid has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Job ID: 400-182185-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-473656 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Quinoline. 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 analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-473251 and analytical batch 400-473656: 2,4-Dinitrophenol and 4-Nitrophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-473251 and analytical batch 400-473656 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 4-Nitrophenol, 2,4,6-Trichlorophenol, 4,6-Dinitro-2-methylphenol, Hexachlorocyclopentadiene, Pentachlorophenol, Benzenethiol and 2-Nitrophenol.

Method 8270D: The laboratory control sample (LCS) for preparation batch 400-473251 and analytical batch 400-473656 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: MW25-ROX-010620 (400-182185-5) and P114R-ROX-010620 (400-182185-12). These results have been reported and qualified.

Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-473251 and analytical batch 400-473656 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, 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 samples contained an allowable number of surrogate compounds outside limits: P114R-ROX-010620 (400-182185-12) and MW22-ROX-010620 (400-182185-14). These results have been reported and qualified.

Method 8270D: The following samples were re-prepared outside of preparation holding time due to confirmation of Pentachlorophenol detects: P114R-ROX-010620 (400-182185-12) and MW22-ROX-010620 (400-182185-14). Both sets of data are reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-473559 recovered above the upper control limit for Dibenz(a,h)anthracene, Indeno[1,2,3-cd]pyrene and 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 400-473827 recovered above the upper control limit for Indeno[1,2,3-cd]pyrene, Benzo[g,h,i]perylene and Dibenz(a,h)anthracene. 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 400-473920 recovered above the upper control limit for 1-Methylnaphthalene, Dibenz(a,h)anthracene, Fluorene and Indeno[1,2,3-cd]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: (CCVIS 400-473559/2), (CCVIS 400-474274/2). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch

Job ID: 400-182185-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

400-473412 and analytical batch 400-473595 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-473595 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) for preparation batch 400-473412 and analytical batch 400-473595 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 initial calibration verification (ICV) result for batch 400-473595 was above the upper control limit. Sample results were non-detects, and have been reported as qualified data.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-473543 and analytical batch 400-474311 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 400-474311 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 400-474311 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-474311 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: 400-182185-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182185-1	TB-ROX-010620-8260-A	Water	01/06/20 00:00	01/07/20 08:46	
400-182185-2	TB-ROX-010620-8011-A	Water	01/06/20 00:00	01/07/20 08:46	
400-182185-3	MW4-ROX-010620-EB	Water	01/06/20 08:20	01/07/20 08:46	
400-182185-4	MW4-ROX-010620	Water	01/06/20 09:15	01/07/20 08:46	
400-182185-5	MW25-ROX-010620	Water	01/06/20 10:05	01/07/20 08:46	
400-182185-6	MW8-ROX-010620	Water	01/06/20 11:10	01/07/20 08:46	
400-182185-7	MW7-ROX-010620	Water	01/06/20 12:45	01/07/20 08:46	
400-182185-8	MW7-ROX-010620-DUP	Water	01/06/20 12:45	01/07/20 08:46	
400-182185-9	TB-ROX-010620-8260-B	Water	01/06/20 00:00	01/07/20 08:46	
400-182185-10	TB-ROX-010620-8011-B	Water	01/06/20 00:00	01/07/20 08:46	
400-182185-11	P114R-ROX-010620-EB	Water	01/06/20 08:30	01/07/20 08:46	
400-182185-12	P114R-ROX-010620	Water	01/06/20 10:20	01/07/20 08:46	
400-182185-13	MW13-ROX-010620	Water	01/06/20 11:10	01/07/20 08:46	
400-182185-14	MW22-ROX-010620	Water	01/06/20 12:35	01/07/20 08:46	
400-182185-15	MW5-ROX-010620	Water	01/06/20 13:20	01/07/20 08:46	

Detection Summary

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-A

Lab Sample ID: 400-182185-1

No Detections.

Client Sample ID: TB-ROX-010620-8011-A

Lab Sample ID: 400-182185-2

No Detections.

Client Sample ID: MW4-ROX-010620-EB

Lab Sample ID: 400-182185-3

No Detections.

Client Sample ID: MW4-ROX-010620

Lab Sample ID: 400-182185-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2.5	J *	19	1.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW25-ROX-010620

Lab Sample ID: 400-182185-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	28		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW8-ROX-010620

Lab Sample ID: 400-182185-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	42000		200	76	ug/L	200		8260B	Total/NA
Ethylbenzene	190	J	200	100	ug/L	200		8260B	Total/NA
o-Xylene	130	J	1000	120	ug/L	200		8260B	Total/NA
Toluene	100	J	200	82	ug/L	200		8260B	Total/NA
Xylenes, Total	440	J	2000	320	ug/L	200		8260B	Total/NA
1-Methylnaphthalene	10		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.5		0.19	0.019	ug/L	1		8270D LL	Total/NA
Indene	2.1	J	9.6	0.96	ug/L	1		8270D	Total/NA
Pentachlorophenol	2.5	J *	19	1.7	ug/L	1		8270D	Total/NA
Phenol - DL	200		48	13	ug/L	5		8270D	Total/NA

Client Sample ID: MW7-ROX-010620

Lab Sample ID: 400-182185-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	800000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	2.4		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	3.3		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzoic acid	23	J * J	29	7.0	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.2	J	19	1.0	ug/L	1		8270D	Total/NA
Pentachlorophenol	2.5	J *	19	1.7	ug/L	1		8270D	Total/NA
Phenol - DL	96		48	12	ug/L	5		8270D	Total/NA

Client Sample ID: MW7-ROX-010620-DUP

Lab Sample ID: 400-182185-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	750000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	2.5		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	3.1		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzoic acid	22	J * J	29	7.0	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.2	J	19	1.0	ug/L	1		8270D	Total/NA
Pentachlorophenol	2.5	J *	19	1.7	ug/L	1		8270D	Total/NA
Phenol - DL	100		48	12	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-B

Lab Sample ID: 400-182185-9

No Detections.

Client Sample ID: TB-ROX-010620-8011-B

Lab Sample ID: 400-182185-10

No Detections.

Client Sample ID: P114R-ROX-010620-EB

Lab Sample ID: 400-182185-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.019	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P114R-ROX-010620

Lab Sample ID: 400-182185-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.9		1.0	0.74	ug/L	1		8260B	Total/NA
Pentachlorophenol	2.8	J *	19	1.7	ug/L	1		8270D	Total/NA
Pentachlorophenol - RERA	2.1	J H	19	1.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW13-ROX-010620

Lab Sample ID: 400-182185-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.7		1.0	0.74	ug/L	1		8260B	Total/NA
Acenaphthene	1.1		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.7		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene - RA	6.2		0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW22-ROX-010620

Lab Sample ID: 400-182185-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	16		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	0.64	J	1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	8.9		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	1.8		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	0.96	J	1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	0.99	J	5.0	0.60	ug/L	1		8260B	Total/NA
Toluene	0.43	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	5.0		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.60	J	1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	9.9	J	10	1.6	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.30		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene - RA	0.38		0.19	0.019	ug/L	1		8270D LL	Total/NA
Pentachlorophenol	2.3	J *	19	1.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW5-ROX-010620

Lab Sample ID: 400-182185-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	0.71	J	1.0	0.53	ug/L	1		8260B	Total/NA
tert-Butylbenzene	1.2		1.0	0.63	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-A
Date Collected: 01/06/20 00:00
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 12:37	1
Acrolein	ND		20	10	ug/L			01/09/20 12:37	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 12:37	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 12:37	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 12:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 12:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 12:37	1
Bromomethane	ND		1.0	0.98	ug/L			01/09/20 12:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 12:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 12:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 12:37	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 12:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 12:37	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 12:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 12:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 12:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 12:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 12:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 12:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 12:37	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 12:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 12:37	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 12:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 12:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 12:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 12:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 12:37	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 12:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 12:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 12:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 12:37	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 12:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 12:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 12:37	1

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-A
Date Collected: 01/06/20 00:00
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 12:37	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 12:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 12:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 12:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 12:37	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 12:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 12:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 12:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 12:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 12:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 12:37	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 12:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 12:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 12:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 12:37	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 12:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 12:37	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*78 - 118*		*01/09/20 12:37*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/09/20 12:37*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/09/20 12:37*	*1*

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8011-A
Date Collected: 01/06/20 00:00
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-2
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	*	0.035	0.0064	ug/L		01/09/20 09:57	01/10/20 17:23	1
1,2-Dibromoethane	ND	*	0.023	0.0059	ug/L		01/09/20 09:57	01/10/20 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*01/09/20 09:57*	*01/10/20 17:23*	*1*

Client Sample ID: MW4-ROX-010620-EB
Date Collected: 01/06/20 08:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 12:32	1
Acrolein	ND		20	10	ug/L			01/10/20 12:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 12:32	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 12:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 12:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 12:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 12:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 12:32	1
2-Butanone (MEK)	ND	*	25	2.6	ug/L			01/10/20 12:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 12:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 12:32	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 12:32	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 12:32	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 12:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 12:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 12:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 12:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 12:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 12:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 12:32	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 12:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 12:32	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 12:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 12:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 12:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 12:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 12:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 12:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 12:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 12:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 12:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 12:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 12:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 12:32	1

Client Sample ID: MW4-ROX-010620-EB
Date Collected: 01/06/20 08:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 12:32	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 12:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 12:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 12:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 12:32	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 12:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 12:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 12:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 12:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 12:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 12:32	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 12:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 12:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 12:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 12:32	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 12:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 12:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*78 - 118*		*01/10/20 12:32*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*01/10/20 12:32*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/10/20 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	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 17:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:27	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*65*		*33 - 138*	*01/08/20 10:16*	*01/10/20 17:27*	*1*
2-Fluorobiphenyl	*91*		*15 - 122*	*01/08/20 10:16*	*01/10/20 17:27*	*1*

Client Sample ID: MW4-ROX-010620-EB
Date Collected: 01/06/20 08:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	121		19 - 130	01/08/20 10:16	01/10/20 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 19:00	1
Benzenethiol	ND	*	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 19:00	1
Benzoic acid	ND	*	29	7.0	ug/L		01/08/20 10:16	01/10/20 19:00	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:00	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 19:00	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 19:00	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/08/20 10:16	01/10/20 19:00	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 19:00	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 19:00	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 19:00	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:00	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 19:00	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 19:00	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 19:00	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:00	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 19:00	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 19:00	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 19:00	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:00	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/08/20 10:16	01/10/20 19:00	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 19:00	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 19:00	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 19:00	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:00	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 19:00	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		01/08/20 10:16	01/10/20 19:00	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 19:00	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:00	1
Isophorone	ND		9.6	0.54	ug/L		01/08/20 10:16	01/10/20 19:00	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 19:00	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/08/20 10:16	01/10/20 19:00	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 19:00	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 19:00	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 19:00	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 19:00	1
2-Nitrophenol	ND	*	9.6	0.62	ug/L		01/08/20 10:16	01/10/20 19:00	1
4-Nitrophenol	ND	*	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 19:00	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:00	1

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

Job ID: 400-182185-1

Client Sample ID: MW4-ROX-010620-EB
Date Collected: 01/06/20 08:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 19:00	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 19:00	1
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	01/10/20 19:00	1
Phenol	ND		9.6	2.5	ug/L		01/08/20 10:16	01/10/20 19:00	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 19:00	1
Quinoline	ND		9.6	5.7	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/08/20 10:16	01/10/20 19:00	1
2,4,6-Trichlorophenol	ND	*	9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*01/08/20 10:16*	*01/10/20 19:00*	*1*
2-Fluorophenol	*25*		*10 - 120*	*01/08/20 10:16*	*01/10/20 19:00*	*1*
Nitrobenzene-d5	*86*		*27 - 120*	*01/08/20 10:16*	*01/10/20 19:00*	*1*
Phenol-d5	*49*		*10 - 120*	*01/08/20 10:16*	*01/10/20 19:00*	*1*
Terphenyl-d14	*73*		*53 - 125*	*01/08/20 10:16*	*01/10/20 19:00*	*1*
2,4,6-Tribromophenol	*52*		*15 - 135*	*01/08/20 10:16*	*01/10/20 19:00*	*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	*	0.034	0.0063	ug/L		01/10/20 09:24	01/17/20 14:57	1
1,2-Dibromoethane	ND		0.023	0.0057	ug/L		01/10/20 09:24	01/17/20 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*		*51 - 149*	*01/10/20 09:24*	*01/17/20 14:57*	*1*

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

Job ID: 400-182185-1

Client Sample ID: MW4-ROX-010620
Date Collected: 01/06/20 09:15
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 13:33	1
Acrolein	ND		20	10	ug/L			01/09/20 13:33	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 13:33	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 13:33	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 13:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 13:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 13:33	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/09/20 13:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 13:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 13:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 13:33	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 13:33	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 13:33	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 13:33	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 13:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 13:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 13:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 13:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 13:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 13:33	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 13:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 13:33	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 13:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 13:33	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 13:33	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 13:33	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 13:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 13:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 13:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 13:33	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 13:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 13:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 13:33	1

Client Sample ID: MW4-ROX-010620
Date Collected: 01/06/20 09:15
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 13:33	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 13:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 13:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 13:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 13:33	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 13:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 13:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 13:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 13:33	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 13:33	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 13:33	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 13:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 13:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 13:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 13:33	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 13:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 13:33	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*01/09/20 13:33*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*01/09/20 13:33*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/09/20 13:33*	*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	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 17:45	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 17:45	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*77*		*33 - 138*	*01/08/20 10:16*	*01/10/20 17:45*	*1*
2-Fluorobiphenyl	*112*		*15 - 122*	*01/08/20 10:16*	*01/10/20 17:45*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	117		19 - 130	01/08/20 10:16	01/10/20 17:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 19:21	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 19:21	1
Benzoic acid	ND	* UJ	29	7.0	ug/L		01/08/20 10:16	01/10/20 19:21	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:21	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 19:21	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 19:21	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/08/20 10:16	01/10/20 19:21	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 19:21	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 19:21	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 19:21	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:21	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 19:21	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 19:21	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 19:21	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:21	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 19:21	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 19:21	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 19:21	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:21	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/08/20 10:16	01/10/20 19:21	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 19:21	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 19:21	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 19:21	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:21	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 19:21	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 19:21	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 19:21	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:21	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 19:21	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 19:21	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/08/20 10:16	01/10/20 19:21	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 19:21	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 19:21	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 19:21	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 19:21	1
2-Nitrophenol	ND	*	9.6	0.62	ug/L		01/08/20 10:16	01/10/20 19:21	1
4-Nitrophenol	ND	* UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 19:21	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:21	1

Client Sample ID: MW4-ROX-010620
Date Collected: 01/06/20 09:15
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 19:21	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 19:21	1
Pentachlorophenol	2.5	J *	19	1.7	ug/L		01/08/20 10:16	01/10/20 19:21	1
Phenol	ND		9.6	2.5	ug/L		01/08/20 10:16	01/10/20 19:21	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 19:21	1
Quinoline	ND	UJ	9.6	5.7	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/08/20 10:16	01/10/20 19:21	1
2,4,6-Trichlorophenol	ND	*	9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*01/08/20 10:16*	*01/10/20 19:21*	*1*
2-Fluorophenol	*38*		*10 - 120*	*01/08/20 10:16*	*01/10/20 19:21*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*01/08/20 10:16*	*01/10/20 19:21*	*1*
Phenol-d5	*66*		*10 - 120*	*01/08/20 10:16*	*01/10/20 19:21*	*1*
Terphenyl-d14	*77*		*53 - 125*	*01/08/20 10:16*	*01/10/20 19:21*	*1*
2,4,6-Tribromophenol	*83*		*15 - 135*	*01/08/20 10:16*	*01/10/20 19:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	02/06/20 12:38	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.031	0.0056	ug/L		01/09/20 09:57	01/10/20 17:44	1
1,2-Dibromoethane	ND	*	0.020	0.0051	ug/L		01/09/20 09:57	01/10/20 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*01/09/20 09:57*	*01/10/20 17:44*	*1*

Client Sample ID: MW25-ROX-010620
Date Collected: 01/06/20 10:05
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 14:00	1
Acrolein	ND		20	10	ug/L			01/09/20 14:00	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 14:00	1
Benzene	28		1.0	0.38	ug/L			01/09/20 14:00	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 14:00	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 14:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 14:00	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/09/20 14:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 14:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 14:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 14:00	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 14:00	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 14:00	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 14:00	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 14:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 14:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 14:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 14:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 14:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 14:00	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 14:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 14:00	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 14:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 14:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 14:00	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 14:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 14:00	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 14:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 14:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 14:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 14:00	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 14:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 14:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 14:00	1

Client Sample ID: MW25-ROX-010620

Date Collected: 01/06/20 10:05
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 14:00	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 14:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 14:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 14:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 14:00	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 14:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 14:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 14:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 14:00	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 14:00	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 14:00	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 14:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 14:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 14:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 14:00	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 14:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 14:00	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*78 - 118*		*01/09/20 14:00*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/09/20 14:00*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/09/20 14:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 18:03	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:03	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*50*		*33 - 138*	*01/08/20 10:16*	*01/10/20 18:03*	*1*
2-Fluorobiphenyl	*101*		*15 - 122*	*01/08/20 10:16*	*01/10/20 18:03*	*1*

Client Sample ID: MW25-ROX-010620
Date Collected: 01/06/20 10:05
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	123		19 - 130	01/08/20 10:16	01/10/20 18:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 19:43	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 19:43	1
Benzoic acid	ND	* UJ	29	7.0	ug/L		01/08/20 10:16	01/10/20 19:43	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:43	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 19:43	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 19:43	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/08/20 10:16	01/10/20 19:43	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 19:43	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 19:43	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 19:43	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:43	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 19:43	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 19:43	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 19:43	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:43	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 19:43	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 19:43	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 19:43	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:43	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/08/20 10:16	01/10/20 19:43	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 19:43	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 19:43	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 19:43	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:43	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 19:43	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 19:43	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 19:43	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 19:43	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 19:43	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 19:43	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/08/20 10:16	01/10/20 19:43	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 19:43	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 19:43	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 19:43	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 19:43	1
2-Nitrophenol	ND	*	9.6	0.62	ug/L		01/08/20 10:16	01/10/20 19:43	1
4-Nitrophenol	ND	* UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 19:43	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:43	1

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

Job ID: 400-182185-1

Client Sample ID: MW25-ROX-010620
Date Collected: 01/06/20 10:05
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 19:43	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 19:43	1
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	01/10/20 19:43	1
Phenol	ND		9.6	2.5	ug/L		01/08/20 10:16	01/10/20 19:43	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 19:43	1
Quinoline	ND	UJ	9.6	5.7	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/08/20 10:16	01/10/20 19:43	1
2,4,6-Trichlorophenol	ND	*	9.6	3.3	ug/L		01/08/20 10:16	01/10/20 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*01/08/20 10:16*	*01/10/20 19:43*	*1*
2-Fluorophenol	*45*		*10 - 120*	*01/08/20 10:16*	*01/10/20 19:43*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*01/08/20 10:16*	*01/10/20 19:43*	*1*
Phenol-d5	*57*		*10 - 120*	*01/08/20 10:16*	*01/10/20 19:43*	*1*
Terphenyl-d14	*51*	X	*53 - 125*	*01/08/20 10:16*	*01/10/20 19:43*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*01/08/20 10:16*	*01/10/20 19:43*	*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	*	0.035	0.0064	ug/L		01/10/20 09:24	01/17/20 15:38	1
1,2-Dibromoethane	ND		0.023	0.0058	ug/L		01/10/20 09:24	01/17/20 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*01/10/20 09:24*	*01/17/20 15:38*	*1*

Client Sample ID: MW8-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-6
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			01/09/20 16:43	200
Acrolein	ND		4000	2000	ug/L			01/09/20 16:43	200
Acrylonitrile	ND		2000	560	ug/L			01/09/20 16:43	200
Benzene	42000		200	76	ug/L			01/09/20 16:43	200
Bromobenzene	ND		200	110	ug/L			01/09/20 16:43	200
Bromochloromethane	ND		200	100	ug/L			01/09/20 16:43	200
Bromodichloromethane	ND		200	100	ug/L			01/09/20 16:43	200
Bromoform	ND		1000	140	ug/L			01/09/20 16:43	200
Bromomethane	ND	UJ	200	200	ug/L			01/09/20 16:43	200
2-Butanone (MEK)	ND		5000	520	ug/L			01/09/20 16:43	200
Carbon disulfide	ND		200	100	ug/L			01/09/20 16:43	200
Carbon tetrachloride	ND		200	100	ug/L			01/09/20 16:43	200
Chlorobenzene	ND		200	100	ug/L			01/09/20 16:43	200
Dibromochloromethane	ND		200	100	ug/L			01/09/20 16:43	200
Chloroethane	ND		200	150	ug/L			01/09/20 16:43	200
2-Chloroethyl vinyl ether	ND		1000	400	ug/L			01/09/20 16:43	200
Chloroform	ND		200	120	ug/L			01/09/20 16:43	200
1-Chlorohexane	ND		200	140	ug/L			01/09/20 16:43	200
Chloromethane	ND		200	170	ug/L			01/09/20 16:43	200
cis-1,2-Dichloroethene	ND		200	100	ug/L			01/09/20 16:43	200
cis-1,3-Dichloropropene	ND		1000	100	ug/L			01/09/20 16:43	200
1,2-Dichlorobenzene	ND		200	100	ug/L			01/09/20 16:43	200
1,3-Dichlorobenzene	ND		200	110	ug/L			01/09/20 16:43	200
1,4-Dichlorobenzene	ND		200	130	ug/L			01/09/20 16:43	200
Dichlorodifluoromethane	ND		200	170	ug/L			01/09/20 16:43	200
1,1-Dichloroethane	ND		200	100	ug/L			01/09/20 16:43	200
1,2-Dichloroethane	ND		200	100	ug/L			01/09/20 16:43	200
1,1-Dichloroethene	ND		200	100	ug/L			01/09/20 16:43	200
1,2-Dichloropropane	ND		200	100	ug/L			01/09/20 16:43	200
1,3-Dichloropropane	ND		200	100	ug/L			01/09/20 16:43	200
2,2-Dichloropropane	ND		200	100	ug/L			01/09/20 16:43	200
1,1-Dichloropropene	ND		200	100	ug/L			01/09/20 16:43	200
Ethylbenzene	190	J	200	100	ug/L			01/09/20 16:43	200
Ethyl methacrylate	ND		200	120	ug/L			01/09/20 16:43	200
Hexachlorobutadiene	ND		1000	180	ug/L			01/09/20 16:43	200
2-Hexanone	ND		5000	620	ug/L			01/09/20 16:43	200
Isopropylbenzene	ND		200	110	ug/L			01/09/20 16:43	200
Methylene bromide	ND		1000	120	ug/L			01/09/20 16:43	200
Methylene Chloride	ND		1000	600	ug/L			01/09/20 16:43	200
4-Methyl-2-pentanone (MIBK)	ND		5000	360	ug/L			01/09/20 16:43	200
Methyl tert-butyl ether	ND		200	150	ug/L			01/09/20 16:43	200
m-Xylene & p-Xylene	ND		1000	320	ug/L			01/09/20 16:43	200
Naphthalene	ND		200	200	ug/L			01/09/20 16:43	200
n-Butylbenzene	ND		200	150	ug/L			01/09/20 16:43	200
N-Propylbenzene	ND		200	140	ug/L			01/09/20 16:43	200
o-Chlorotoluene	ND		200	110	ug/L			01/09/20 16:43	200
o-Xylene	130	J	1000	120	ug/L			01/09/20 16:43	200
p-Chlorotoluene	ND		200	110	ug/L			01/09/20 16:43	200
p-Isopropyltoluene	ND		200	140	ug/L			01/09/20 16:43	200

Client Sample ID: MW8-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-6
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			01/09/20 16:43	200
Styrene	ND		200	200	ug/L			01/09/20 16:43	200
tert-Butylbenzene	ND		200	130	ug/L			01/09/20 16:43	200
1,1,1,2-Tetrachloroethane	ND		200	100	ug/L			01/09/20 16:43	200
1,1,2,2-Tetrachloroethane	ND		200	100	ug/L			01/09/20 16:43	200
Tetrachloroethene	ND		200	120	ug/L			01/09/20 16:43	200
Toluene	100	J	200	82	ug/L			01/09/20 16:43	200
trans-1,2-Dichloroethene	ND		200	100	ug/L			01/09/20 16:43	200
trans-1,3-Dichloropropene	ND		1000	100	ug/L			01/09/20 16:43	200
1,2,3-Trichlorobenzene	ND		200	140	ug/L			01/09/20 16:43	200
1,2,4-Trichlorobenzene	ND		200	160	ug/L			01/09/20 16:43	200
1,1,1-Trichloroethane	ND		200	100	ug/L			01/09/20 16:43	200
1,1,2-Trichloroethane	ND		1000	100	ug/L			01/09/20 16:43	200
Trichloroethene	ND		200	100	ug/L			01/09/20 16:43	200
Trichlorofluoromethane	ND		200	100	ug/L			01/09/20 16:43	200
1,2,3-Trichloropropane	ND		1000	170	ug/L			01/09/20 16:43	200
1,2,4-Trimethylbenzene	ND		200	160	ug/L			01/09/20 16:43	200
1,3,5-Trimethylbenzene	ND		200	110	ug/L			01/09/20 16:43	200
Vinyl acetate	ND		5000	400	ug/L			01/09/20 16:43	200
Vinyl chloride	ND		200	100	ug/L			01/09/20 16:43	200
Xylenes, Total	440	J	2000	320	ug/L			01/09/20 16:43	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*01/09/20 16:43*	*200*
Dibromofluoromethane	*104*		*81 - 121*		*01/09/20 16:43*	*200*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/09/20 16:43*	*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		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Chrysene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 18:21	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 18:21	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
1-Methylnaphthalene	10		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1
2-Methylnaphthalene	1.5		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*33 - 138*	*01/08/20 10:16*	*01/10/20 18:21*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*01/08/20 10:16*	*01/10/20 18:21*	*1*

Client Sample ID: MW8-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*105*		*19 - 130*	*01/08/20 10:16*	*01/10/20 18:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/08/20 10:16	01/10/20 20:04	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 20:04	1
Benzoic acid	ND	* UJ	29	7.0	ug/L		01/08/20 10:16	01/10/20 20:04	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:04	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 20:04	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 20:04	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/08/20 10:16	01/10/20 20:04	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 20:04	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 20:04	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 20:04	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 20:04	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/08/20 10:16	01/10/20 20:04	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 20:04	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 20:04	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:04	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 20:04	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 20:04	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 20:04	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/08/20 10:16	01/10/20 20:04	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/08/20 10:16	01/10/20 20:04	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 20:04	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 20:04	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 20:04	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:04	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 20:04	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 20:04	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 20:04	1
Indene	2.1	J	9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:04	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 20:04	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 20:04	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/08/20 10:16	01/10/20 20:04	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 20:04	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 20:04	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 20:04	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 20:04	1
2-Nitrophenol	ND	*	9.6	0.63	ug/L		01/08/20 10:16	01/10/20 20:04	1
4-Nitrophenol	ND	* UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 20:04	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/08/20 10:16	01/10/20 20:04	1

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

Job ID: 400-182185-1

Client Sample ID: MW8-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-6
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		01/08/20 10:16	01/10/20 20:04	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 20:04	1
Pentachlorophenol	2.5	J *	19	1.7	ug/L		01/08/20 10:16	01/10/20 20:04	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 20:04	1
Quinoline	ND	UJ	9.6	5.8	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 20:04	1
2,4,6-Trichlorophenol	ND	*	9.6	3.4	ug/L		01/08/20 10:16	01/10/20 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 120*	*01/08/20 10:16*	*01/10/20 20:04*	*1*
2-Fluorophenol	*29*		*10 - 120*	*01/08/20 10:16*	*01/10/20 20:04*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*01/08/20 10:16*	*01/10/20 20:04*	*1*
Phenol-d5	*63*		*10 - 120*	*01/08/20 10:16*	*01/10/20 20:04*	*1*
Terphenyl-d14	*64*		*53 - 125*	*01/08/20 10:16*	*01/10/20 20:04*	*1*
2,4,6-Tribromophenol	*86*		*15 - 135*	*01/08/20 10:16*	*01/10/20 20:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	200		48	13	ug/L		01/08/20 10:16	01/16/20 17:56	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	02/06/20 13:02	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.034	0.0062	ug/L		01/09/20 09:57	01/10/20 18:24	1
1,2-Dibromoethane	ND	*	0.022	0.0056	ug/L		01/09/20 09:57	01/10/20 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*01/09/20 09:57*	*01/10/20 18:24*	*1*

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

Job ID: 400-182185-1

Client Sample ID: MW7-ROX-010620
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			01/09/20 17:10	5000
Acrolein	ND		100000	50000	ug/L			01/09/20 17:10	5000
Acrylonitrile	ND		50000	14000	ug/L			01/09/20 17:10	5000
Benzene	800000		5000	1900	ug/L			01/09/20 17:10	5000
Bromobenzene	ND		5000	2700	ug/L			01/09/20 17:10	5000
Bromochloromethane	ND		5000	2600	ug/L			01/09/20 17:10	5000
Bromodichloromethane	ND		5000	2500	ug/L			01/09/20 17:10	5000
Bromoform	ND		25000	3600	ug/L			01/09/20 17:10	5000
Bromomethane	ND	U3	5000	4900	ug/L			01/09/20 17:10	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			01/09/20 17:10	5000
Carbon disulfide	ND		5000	2500	ug/L			01/09/20 17:10	5000
Carbon tetrachloride	ND		5000	2500	ug/L			01/09/20 17:10	5000
Chlorobenzene	ND		5000	2500	ug/L			01/09/20 17:10	5000
Dibromochloromethane	ND		5000	2500	ug/L			01/09/20 17:10	5000
Chloroethane	ND		5000	3800	ug/L			01/09/20 17:10	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			01/09/20 17:10	5000
Chloroform	ND		5000	3000	ug/L			01/09/20 17:10	5000
1-Chlorohexane	ND		5000	3500	ug/L			01/09/20 17:10	5000
Chloromethane	ND		5000	4200	ug/L			01/09/20 17:10	5000
cis-1,2-Dichloroethene	ND		5000	2500	ug/L			01/09/20 17:10	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			01/09/20 17:10	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			01/09/20 17:10	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			01/09/20 17:10	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			01/09/20 17:10	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,2-Dichloroethane	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			01/09/20 17:10	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			01/09/20 17:10	5000
Ethylbenzene	ND		5000	2500	ug/L			01/09/20 17:10	5000
Ethyl methacrylate	ND		5000	3000	ug/L			01/09/20 17:10	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			01/09/20 17:10	5000
2-Hexanone	ND		130000	16000	ug/L			01/09/20 17:10	5000
Isopropylbenzene	ND		5000	2700	ug/L			01/09/20 17:10	5000
Methylene bromide	ND		25000	3000	ug/L			01/09/20 17:10	5000
Methylene Chloride	ND		25000	15000	ug/L			01/09/20 17:10	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			01/09/20 17:10	5000
Methyl tert-butyl ether	ND		5000	3700	ug/L			01/09/20 17:10	5000
m-Xylene & p-Xylene	ND		25000	8000	ug/L			01/09/20 17:10	5000
Naphthalene	ND		5000	5000	ug/L			01/09/20 17:10	5000
n-Butylbenzene	ND		5000	3800	ug/L			01/09/20 17:10	5000
N-Propylbenzene	ND		5000	3500	ug/L			01/09/20 17:10	5000
o-Chlorotoluene	ND		5000	2900	ug/L			01/09/20 17:10	5000
o-Xylene	ND		25000	3000	ug/L			01/09/20 17:10	5000
p-Chlorotoluene	ND		5000	2800	ug/L			01/09/20 17:10	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			01/09/20 17:10	5000

Client Sample ID: MW7-ROX-010620
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5000	3500	ug/L			01/09/20 17:10	5000
Styrene	ND		5000	5000	ug/L			01/09/20 17:10	5000
tert-Butylbenzene	ND		5000	3200	ug/L			01/09/20 17:10	5000
1,1,1,2-Tetrachloroethane	ND		5000	2600	ug/L			01/09/20 17:10	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			01/09/20 17:10	5000
Tetrachloroethene	ND		5000	2900	ug/L			01/09/20 17:10	5000
Toluene	ND		5000	2100	ug/L			01/09/20 17:10	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			01/09/20 17:10	5000
trans-1,3-Dichloropropene	ND		25000	2500	ug/L			01/09/20 17:10	5000
1,2,3-Trichlorobenzene	ND		5000	3500	ug/L			01/09/20 17:10	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			01/09/20 17:10	5000
1,1,1-Trichloroethane	ND		5000	2500	ug/L			01/09/20 17:10	5000
1,1,2-Trichloroethane	ND		25000	2500	ug/L			01/09/20 17:10	5000
Trichloroethene	ND		5000	2500	ug/L			01/09/20 17:10	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			01/09/20 17:10	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			01/09/20 17:10	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			01/09/20 17:10	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			01/09/20 17:10	5000
Vinyl acetate	ND		130000	10000	ug/L			01/09/20 17:10	5000
Vinyl chloride	ND		5000	2500	ug/L			01/09/20 17:10	5000
Xylenes, Total	ND		50000	8000	ug/L			01/09/20 17:10	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*78 - 118*		*01/09/20 17:10*	*5000*
Dibromofluoromethane	*106*		*81 - 121*		*01/09/20 17:10*	*5000*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/09/20 17:10*	*5000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 18:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:39	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
1-Methylnaphthalene	2.4		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1
2-Methylnaphthalene	3.3		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*33 - 138*	*01/08/20 10:16*	*01/10/20 18:39*	*1*
2-Fluorobiphenyl	*96*		*15 - 122*	*01/08/20 10:16*	*01/10/20 18:39*	*1*

Client Sample ID: MW7-ROX-010620
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-7
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*117*		*19 - 130*	*01/08/20 10:16*	*01/10/20 18:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 20:25	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 20:25	1
Benzoic acid	23	J * J	29	7.0	ug/L		01/08/20 10:16	01/10/20 20:25	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:25	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 20:25	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 20:25	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/08/20 10:16	01/10/20 20:25	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 20:25	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 20:25	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 20:25	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 20:25	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 20:25	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 20:25	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 20:25	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:25	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 20:25	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 20:25	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 20:25	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 20:25	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/08/20 10:16	01/10/20 20:25	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 20:25	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 20:25	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 20:25	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:25	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 20:25	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 20:25	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 20:25	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:25	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 20:25	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 20:25	1
3 & 4 Methylphenol	1.2	J	19	1.0	ug/L		01/08/20 10:16	01/10/20 20:25	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 20:25	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 20:25	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 20:25	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 20:25	1
2-Nitrophenol	ND	*	9.6	0.62	ug/L		01/08/20 10:16	01/10/20 20:25	1
4-Nitrophenol	ND	* UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 20:25	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 20:25	1

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

Job ID: 400-182185-1

Client Sample ID: MW7-ROX-010620
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-7
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		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 20:25	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 20:25	1
Pentachlorophenol	2.5	J *	19	1.7	ug/L		01/08/20 10:16	01/10/20 20:25	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 20:25	1
Quinoline	ND	U5	9.6	5.7	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/08/20 10:16	01/10/20 20:25	1
2,4,6-Trichlorophenol	ND	*	9.6	3.3	ug/L		01/08/20 10:16	01/10/20 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*01/08/20 10:16*	*01/10/20 20:25*	*1*
2-Fluorophenol	*40*		*10 - 120*	*01/08/20 10:16*	*01/10/20 20:25*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*01/08/20 10:16*	*01/10/20 20:25*	*1*
Phenol-d5	*73*		*10 - 120*	*01/08/20 10:16*	*01/10/20 20:25*	*1*
Terphenyl-d14	*61*		*53 - 125*	*01/08/20 10:16*	*01/10/20 20:25*	*1*
2,4,6-Tribromophenol	*109*		*15 - 135*	*01/08/20 10:16*	*01/10/20 20:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	96		48	12	ug/L		01/08/20 10:16	01/16/20 18:21	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	02/06/20 13:27	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.032	0.0059	ug/L		01/10/20 09:24	01/17/20 15:58	1
1,2-Dibromoethane	ND		0.021	0.0054	ug/L		01/10/20 09:24	01/17/20 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*01/10/20 09:24*	*01/17/20 15:58*	*1*

Client Sample ID: MW7-ROX-010620-DUP
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			01/09/20 17:36	5000
Acrolein	ND		100000	50000	ug/L			01/09/20 17:36	5000
Acrylonitrile	ND		50000	14000	ug/L			01/09/20 17:36	5000
Benzene	750000		5000	1900	ug/L			01/09/20 17:36	5000
Bromobenzene	ND		5000	2700	ug/L			01/09/20 17:36	5000
Bromochloromethane	ND		5000	2600	ug/L			01/09/20 17:36	5000
Bromodichloromethane	ND		5000	2500	ug/L			01/09/20 17:36	5000
Bromoform	ND		25000	3600	ug/L			01/09/20 17:36	5000
Bromomethane	ND	UJ	5000	4900	ug/L			01/09/20 17:36	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			01/09/20 17:36	5000
Carbon disulfide	ND		5000	2500	ug/L			01/09/20 17:36	5000
Carbon tetrachloride	ND		5000	2500	ug/L			01/09/20 17:36	5000
Chlorobenzene	ND		5000	2500	ug/L			01/09/20 17:36	5000
Dibromochloromethane	ND		5000	2500	ug/L			01/09/20 17:36	5000
Chloroethane	ND		5000	3800	ug/L			01/09/20 17:36	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			01/09/20 17:36	5000
Chloroform	ND		5000	3000	ug/L			01/09/20 17:36	5000
1-Chlorohexane	ND		5000	3500	ug/L			01/09/20 17:36	5000
Chloromethane	ND		5000	4200	ug/L			01/09/20 17:36	5000
cis-1,2-Dichloroethene	ND		5000	2500	ug/L			01/09/20 17:36	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			01/09/20 17:36	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			01/09/20 17:36	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			01/09/20 17:36	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			01/09/20 17:36	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,2-Dichloroethane	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			01/09/20 17:36	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			01/09/20 17:36	5000
Ethylbenzene	ND		5000	2500	ug/L			01/09/20 17:36	5000
Ethyl methacrylate	ND		5000	3000	ug/L			01/09/20 17:36	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			01/09/20 17:36	5000
2-Hexanone	ND		130000	16000	ug/L			01/09/20 17:36	5000
Isopropylbenzene	ND		5000	2700	ug/L			01/09/20 17:36	5000
Methylene bromide	ND		25000	3000	ug/L			01/09/20 17:36	5000
Methylene Chloride	ND		25000	15000	ug/L			01/09/20 17:36	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			01/09/20 17:36	5000
Methyl tert-butyl ether	ND		5000	3700	ug/L			01/09/20 17:36	5000
m-Xylene & p-Xylene	ND		25000	8000	ug/L			01/09/20 17:36	5000
Naphthalene	ND		5000	5000	ug/L			01/09/20 17:36	5000
n-Butylbenzene	ND		5000	3800	ug/L			01/09/20 17:36	5000
N-Propylbenzene	ND		5000	3500	ug/L			01/09/20 17:36	5000
o-Chlorotoluene	ND		5000	2900	ug/L			01/09/20 17:36	5000
o-Xylene	ND		25000	3000	ug/L			01/09/20 17:36	5000
p-Chlorotoluene	ND		5000	2800	ug/L			01/09/20 17:36	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			01/09/20 17:36	5000

Client Sample ID: MW7-ROX-010620-DUP
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5000	3500	ug/L			01/09/20 17:36	5000
Styrene	ND		5000	5000	ug/L			01/09/20 17:36	5000
tert-Butylbenzene	ND		5000	3200	ug/L			01/09/20 17:36	5000
1,1,1,2-Tetrachloroethane	ND		5000	2600	ug/L			01/09/20 17:36	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			01/09/20 17:36	5000
Tetrachloroethene	ND		5000	2900	ug/L			01/09/20 17:36	5000
Toluene	ND		5000	2100	ug/L			01/09/20 17:36	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			01/09/20 17:36	5000
trans-1,3-Dichloropropene	ND		25000	2500	ug/L			01/09/20 17:36	5000
1,2,3-Trichlorobenzene	ND		5000	3500	ug/L			01/09/20 17:36	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			01/09/20 17:36	5000
1,1,1-Trichloroethane	ND		5000	2500	ug/L			01/09/20 17:36	5000
1,1,2-Trichloroethane	ND		25000	2500	ug/L			01/09/20 17:36	5000
Trichloroethene	ND		5000	2500	ug/L			01/09/20 17:36	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			01/09/20 17:36	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			01/09/20 17:36	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			01/09/20 17:36	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			01/09/20 17:36	5000
Vinyl acetate	ND		130000	10000	ug/L			01/09/20 17:36	5000
Vinyl chloride	ND		5000	2500	ug/L			01/09/20 17:36	5000
Xylenes, Total	ND		50000	8000	ug/L			01/09/20 17:36	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*78 - 118*		*01/09/20 17:36*	*5000*
Dibromofluoromethane	*107*		*81 - 121*		*01/09/20 17:36*	*5000*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/09/20 17:36*	*5000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 18:57	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/10/20 18:57	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
1-Methylnaphthalene	2.5		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1
2-Methylnaphthalene	3.1		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*64*		*33 - 138*	*01/08/20 10:16*	*01/10/20 18:57*	*1*
2-Fluorobiphenyl	*103*		*15 - 122*	*01/08/20 10:16*	*01/10/20 18:57*	*1*

Client Sample ID: MW7-ROX-010620-DUP
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	106		19 - 130	01/08/20 10:16	01/10/20 18:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/08/20 10:16	01/10/20 20:46	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 20:46	1
Benzoic acid	22	J * J	29	7.0	ug/L		01/08/20 10:16	01/10/20 20:46	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:46	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 20:46	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 20:46	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/08/20 10:16	01/10/20 20:46	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 20:46	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 20:46	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 20:46	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 20:46	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/08/20 10:16	01/10/20 20:46	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 20:46	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 20:46	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:46	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 20:46	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 20:46	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 20:46	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/08/20 10:16	01/10/20 20:46	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/08/20 10:16	01/10/20 20:46	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 20:46	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 20:46	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 20:46	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:46	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 20:46	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 20:46	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 20:46	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 20:46	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 20:46	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 20:46	1
3 & 4 Methylphenol	1.2	J	19	1.0	ug/L		01/08/20 10:16	01/10/20 20:46	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 20:46	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 20:46	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 20:46	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 20:46	1
2-Nitrophenol	ND	*	9.6	0.62	ug/L		01/08/20 10:16	01/10/20 20:46	1
4-Nitrophenol	ND	* UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 20:46	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/08/20 10:16	01/10/20 20:46	1

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

Job ID: 400-182185-1

Client Sample ID: MW7-ROX-010620-DUP
Date Collected: 01/06/20 12:45
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-8
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		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 20:46	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 20:46	1
Pentachlorophenol	2.5	J *	19	1.7	ug/L		01/08/20 10:16	01/10/20 20:46	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 20:46	1
Quinoline	ND	UJ	9.6	5.8	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 20:46	1
2,4,6-Trichlorophenol	ND	*	9.6	3.4	ug/L		01/08/20 10:16	01/10/20 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*01/08/20 10:16*	*01/10/20 20:46*	*1*
2-Fluorophenol	*39*		*10 - 120*	*01/08/20 10:16*	*01/10/20 20:46*	*1*
Nitrobenzene-d5	*87*		*27 - 120*	*01/08/20 10:16*	*01/10/20 20:46*	*1*
Phenol-d5	*73*		*10 - 120*	*01/08/20 10:16*	*01/10/20 20:46*	*1*
Terphenyl-d14	*54*		*53 - 125*	*01/08/20 10:16*	*01/10/20 20:46*	*1*
2,4,6-Tribromophenol	*98*		*15 - 135*	*01/08/20 10:16*	*01/10/20 20:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	100		48	12	ug/L		01/08/20 10:16	01/16/20 18:47	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	02/06/20 13:51	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.034	0.0063	ug/L		01/09/20 09:57	01/10/20 18:45	1
1,2-Dibromoethane	ND	*	0.023	0.0057	ug/L		01/09/20 09:57	01/10/20 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/09/20 09:57*	*01/10/20 18:45*	*1*

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-B
Date Collected: 01/06/20 00:00
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 13:06	1
Acrolein	ND		20	10	ug/L			01/09/20 13:06	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 13:06	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 13:06	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 13:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 13:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 13:06	1
Bromomethane	ND		1.0	0.98	ug/L			01/09/20 13:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 13:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 13:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 13:06	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 13:06	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 13:06	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 13:06	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 13:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 13:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 13:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 13:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 13:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 13:06	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 13:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 13:06	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 13:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 13:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 13:06	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 13:06	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 13:06	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 13:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 13:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 13:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 13:06	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 13:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 13:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 13:06	1

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-B
Date Collected: 01/06/20 00:00
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 13:06	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 13:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 13:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 13:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 13:06	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 13:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 13:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 13:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 13:06	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 13:06	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 13:06	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 13:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 13:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 13:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 13:06	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 13:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 13:06	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*78 - 118*		*01/09/20 13:06*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/09/20 13:06*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/09/20 13:06*	*1*

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

Job ID: 400-182185-1

Client Sample ID: TB-ROX-010620-8011-B
Date Collected: 01/06/20 00:00
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-10
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.033	0.0060	ug/L		01/10/20 09:40	01/17/20 16:59	1
1,2-Dibromoethane	ND		0.022	0.0054	ug/L		01/10/20 09:40	01/17/20 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*129*		*51 - 149*	*01/10/20 09:40*	*01/17/20 16:59*	*1*

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

Job ID: 400-182185-1

Client Sample ID: P114R-ROX-010620-EB
Date Collected: 01/06/20 08:30
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 12:04	1
Acrolein	ND		20	10	ug/L			01/10/20 12:04	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 12:04	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 12:04	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 12:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 12:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 12:04	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 12:04	1
2-Butanone (MEK)	ND	*	25	2.6	ug/L			01/10/20 12:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 12:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 12:04	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 12:04	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 12:04	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 12:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 12:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 12:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 12:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 12:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 12:04	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 12:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 12:04	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 12:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 12:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 12:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 12:04	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 12:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 12:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 12:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 12:04	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 12:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 12:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 12:04	1

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

Job ID: 400-182185-1

Client Sample ID: P114R-ROX-010620-EB
Date Collected: 01/06/20 08:30
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 12:04	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 12:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 12:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 12:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 12:04	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 12:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 12:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 12:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 12:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 12:04	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 12:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 12:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 12:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 12:04	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 12:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 12:04	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*78 - 118*		*01/10/20 12:04*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/10/20 12:04*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/10/20 12:04*	*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		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Chrysene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/10/20 19:15	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/08/20 10:16	01/10/20 19:15	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1
2-Methylnaphthalene	0.019	J	0.19	0.019	ug/L		01/08/20 10:16	01/10/20 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*33 - 138*	*01/08/20 10:16*	*01/10/20 19:15*	*1*
2-Fluorobiphenyl	*105*		*15 - 122*	*01/08/20 10:16*	*01/10/20 19:15*	*1*

Client Sample ID: P114R-ROX-010620-EB
Date Collected: 01/06/20 08:30
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	101		19 - 130	01/08/20 10:16	01/10/20 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		01/08/20 10:16	01/10/20 21:07	1
Benzenethiol	ND	*	9.7	1.6	ug/L		01/08/20 10:16	01/10/20 21:07	1
Benzoic acid	ND	*	29	7.1	ug/L		01/08/20 10:16	01/10/20 21:07	1
Benzyl alcohol	ND		9.7	1.9	ug/L		01/08/20 10:16	01/10/20 21:07	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		01/08/20 10:16	01/10/20 21:07	1
Bis(2-chloroethyl)ether	ND		9.7	0.71	ug/L		01/08/20 10:16	01/10/20 21:07	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		01/08/20 10:16	01/10/20 21:07	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		01/08/20 10:16	01/10/20 21:07	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		01/08/20 10:16	01/10/20 21:07	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		01/08/20 10:16	01/10/20 21:07	1
4-Chloroaniline	ND		9.7	3.3	ug/L		01/08/20 10:16	01/10/20 21:07	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		01/08/20 10:16	01/10/20 21:07	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		01/08/20 10:16	01/10/20 21:07	1
2-Chlorophenol	ND		9.7	2.1	ug/L		01/08/20 10:16	01/10/20 21:07	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		01/08/20 10:16	01/10/20 21:07	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		01/08/20 10:16	01/10/20 21:07	1
Dibenzofuran	ND		9.7	0.50	ug/L		01/08/20 10:16	01/10/20 21:07	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		01/08/20 10:16	01/10/20 21:07	1
Diethyl phthalate	ND		9.7	0.68	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		01/08/20 10:16	01/10/20 21:07	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		01/08/20 10:16	01/10/20 21:07	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		01/08/20 10:16	01/10/20 21:07	1
4,6-Dinitro-ortho-cresol	ND	*	9.7	1.9	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		01/08/20 10:16	01/10/20 21:07	1
Di-n-octyl phthalate	ND		9.7	0.42	ug/L		01/08/20 10:16	01/10/20 21:07	1
1,4-Dioxane	ND		9.7	0.97	ug/L		01/08/20 10:16	01/10/20 21:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		01/08/20 10:16	01/10/20 21:07	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		01/08/20 10:16	01/10/20 21:07	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		01/08/20 10:16	01/10/20 21:07	1
Hexachloroethane	ND		9.7	4.1	ug/L		01/08/20 10:16	01/10/20 21:07	1
Indene	ND		9.7	0.97	ug/L		01/08/20 10:16	01/10/20 21:07	1
Isophorone	ND		9.7	0.55	ug/L		01/08/20 10:16	01/10/20 21:07	1
2-Methylphenol	ND		9.7	1.7	ug/L		01/08/20 10:16	01/10/20 21:07	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/08/20 10:16	01/10/20 21:07	1
2-Nitroaniline	ND		9.7	2.1	ug/L		01/08/20 10:16	01/10/20 21:07	1
3-Nitroaniline	ND		9.7	1.7	ug/L		01/08/20 10:16	01/10/20 21:07	1
4-Nitroaniline	ND		9.7	2.4	ug/L		01/08/20 10:16	01/10/20 21:07	1
Nitrobenzene	ND		9.7	0.53	ug/L		01/08/20 10:16	01/10/20 21:07	1
2-Nitrophenol	ND	*	9.7	0.63	ug/L		01/08/20 10:16	01/10/20 21:07	1
4-Nitrophenol	ND	*	9.7	2.0	ug/L		01/08/20 10:16	01/10/20 21:07	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		01/08/20 10:16	01/10/20 21:07	1

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

Job ID: 400-182185-1

Client Sample ID: P114R-ROX-010620-EB
Date Collected: 01/06/20 08:30
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		01/08/20 10:16	01/10/20 21:07	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		01/08/20 10:16	01/10/20 21:07	1
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	01/10/20 21:07	1
Phenol	ND		9.7	2.5	ug/L		01/08/20 10:16	01/10/20 21:07	1
Pyridine	ND		9.7	3.1	ug/L		01/08/20 10:16	01/10/20 21:07	1
Quinoline	ND		9.7	5.8	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		01/08/20 10:16	01/10/20 21:07	1
2,4,6-Trichlorophenol	ND	*	9.7	3.4	ug/L		01/08/20 10:16	01/10/20 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*34 - 120*	*01/08/20 10:16*	*01/10/20 21:07*	*1*
2-Fluorophenol	*30*		*10 - 120*	*01/08/20 10:16*	*01/10/20 21:07*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*01/08/20 10:16*	*01/10/20 21:07*	*1*
Phenol-d5	*21*		*10 - 120*	*01/08/20 10:16*	*01/10/20 21:07*	*1*
Terphenyl-d14	*69*		*53 - 125*	*01/08/20 10:16*	*01/10/20 21:07*	*1*
2,4,6-Tribromophenol	*20*		*15 - 135*	*01/08/20 10:16*	*01/10/20 21:07*	*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	*	0.032	0.0059	ug/L		01/09/20 09:57	01/10/20 19:05	1
1,2-Dibromoethane	ND	*	0.022	0.0054	ug/L		01/09/20 09:57	01/10/20 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*01/09/20 09:57*	*01/10/20 19:05*	*1*

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

Job ID: 400-182185-1

Client Sample ID: P114R-ROX-010620
Date Collected: 01/06/20 10:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 14:54	1
Acrolein	ND		20	10	ug/L			01/09/20 14:54	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 14:54	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 14:54	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 14:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 14:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 14:54	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/09/20 14:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 14:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 14:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 14:54	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 14:54	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 14:54	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 14:54	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 14:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 14:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 14:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 14:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 14:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 14:54	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 14:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 14:54	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 14:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 14:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 14:54	1
Methyl tert-butyl ether	1.9		1.0	0.74	ug/L			01/09/20 14:54	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 14:54	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 14:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 14:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 14:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 14:54	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 14:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 14:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 14:54	1

Client Sample ID: P114R-ROX-010620

Date Collected: 01/06/20 10:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 14:54	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 14:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 14:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 14:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 14:54	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 14:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 14:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 14:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 14:54	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 14:54	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 14:54	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 14:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 14:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 14:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 14:54	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 14:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 14:54	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*78 - 118*		*01/09/20 14:54*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*01/09/20 14:54*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/09/20 14:54*	*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		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/14/20 10:18	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:18	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*53*		*33 - 138*	*01/08/20 10:16*	*01/14/20 10:18*	*1*
2-Fluorobiphenyl	*84*		*15 - 122*	*01/08/20 10:16*	*01/14/20 10:18*	*1*

Client Sample ID: P114R-ROX-010620
Date Collected: 01/06/20 10:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-12
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	79		19 - 130	01/08/20 10:16	01/14/20 10:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/08/20 10:16	01/10/20 21:29	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		01/08/20 10:16	01/10/20 21:29	1
Benzoic acid	ND	* UJ	28	6.9	ug/L		01/08/20 10:16	01/10/20 21:29	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/08/20 10:16	01/10/20 21:29	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		01/08/20 10:16	01/10/20 21:29	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		01/08/20 10:16	01/10/20 21:29	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		01/08/20 10:16	01/10/20 21:29	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/08/20 10:16	01/10/20 21:29	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		01/08/20 10:16	01/10/20 21:29	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		01/08/20 10:16	01/10/20 21:29	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/08/20 10:16	01/10/20 21:29	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/08/20 10:16	01/10/20 21:29	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		01/08/20 10:16	01/10/20 21:29	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/08/20 10:16	01/10/20 21:29	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/08/20 10:16	01/10/20 21:29	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		01/08/20 10:16	01/10/20 21:29	1
Dibenzofuran	ND		9.5	0.49	ug/L		01/08/20 10:16	01/10/20 21:29	1
3,3'-Dichlorobenzidine	ND	*	9.5	2.5	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/08/20 10:16	01/10/20 21:29	1
Diethyl phthalate	ND		9.5	0.66	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/08/20 10:16	01/10/20 21:29	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		01/08/20 10:16	01/10/20 21:29	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/08/20 10:16	01/10/20 21:29	1
4,6-Dinitro-ortho-cresol	ND	*	9.5	1.9	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,4-Dinitrophenol	ND	* UJ	28	3.2	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/08/20 10:16	01/10/20 21:29	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		01/08/20 10:16	01/10/20 21:29	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/08/20 10:16	01/10/20 21:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/08/20 10:16	01/10/20 21:29	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		01/08/20 10:16	01/10/20 21:29	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 21:29	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/08/20 10:16	01/10/20 21:29	1
Indene	ND		9.5	0.95	ug/L		01/08/20 10:16	01/10/20 21:29	1
Isophorone	ND		9.5	0.54	ug/L		01/08/20 10:16	01/10/20 21:29	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/08/20 10:16	01/10/20 21:29	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/08/20 10:16	01/10/20 21:29	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/08/20 10:16	01/10/20 21:29	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/08/20 10:16	01/10/20 21:29	1
4-Nitroaniline	ND		9.5	2.4	ug/L		01/08/20 10:16	01/10/20 21:29	1
Nitrobenzene	ND		9.5	0.52	ug/L		01/08/20 10:16	01/10/20 21:29	1
2-Nitrophenol	ND	*	9.5	0.62	ug/L		01/08/20 10:16	01/10/20 21:29	1
4-Nitrophenol	ND	* UJ	9.5	2.0	ug/L		01/08/20 10:16	01/10/20 21:29	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/08/20 10:16	01/10/20 21:29	1

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

Job ID: 400-182185-1

Client Sample ID: P114R-ROX-010620
Date Collected: 01/06/20 10:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/08/20 10:16	01/10/20 21:29	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		01/08/20 10:16	01/10/20 21:29	1
Pentachlorophenol	2.8	J *	19	1.7	ug/L		01/08/20 10:16	01/10/20 21:29	1
Phenol	ND		9.5	2.5	ug/L		01/08/20 10:16	01/10/20 21:29	1
Pyridine	ND		9.5	3.0	ug/L		01/08/20 10:16	01/10/20 21:29	1
Quinoline	ND	U5	9.5	5.7	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/08/20 10:16	01/10/20 21:29	1
2,4,6-Trichlorophenol	ND	*	9.5	3.3	ug/L		01/08/20 10:16	01/10/20 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 120*	*01/08/20 10:16*	*01/10/20 21:29*	*1*
2-Fluorophenol	*45*		*10 - 120*	*01/08/20 10:16*	*01/10/20 21:29*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*01/08/20 10:16*	*01/10/20 21:29*	*1*
Phenol-d5	*65*		*10 - 120*	*01/08/20 10:16*	*01/10/20 21:29*	*1*
Terphenyl-d14	*50*	*X*	*53 - 125*	*01/08/20 10:16*	*01/10/20 21:29*	*1*
2,4,6-Tribromophenol	*80*		*15 - 135*	*01/08/20 10:16*	*01/10/20 21:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	2.1	J H J	19	1.8	ug/L		02/06/20 09:55	02/06/20 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*34 - 120*	*02/06/20 09:55*	*02/06/20 18:22*	*1*
2-Fluorophenol	*54*		*10 - 120*	*02/06/20 09:55*	*02/06/20 18:22*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*02/06/20 09:55*	*02/06/20 18:22*	*1*
Phenol-d5	*57*		*10 - 120*	*02/06/20 09:55*	*02/06/20 18:22*	*1*
Terphenyl-d14	*50*	*X*	*53 - 125*	*02/06/20 09:55*	*02/06/20 18:22*	*1*
2,4,6-Tribromophenol	*54*		*15 - 135*	*02/06/20 09:55*	*02/06/20 18:22*	*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	*	0.034	0.0062	ug/L		01/10/20 09:24	01/17/20 16:39	1
1,2-Dibromoethane	ND		0.023	0.0056	ug/L		01/10/20 09:24	01/17/20 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*51 - 149*	*01/10/20 09:24*	*01/17/20 16:39*	*1*

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

Job ID: 400-182185-1

Client Sample ID: MW13-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 15:22	1
Acrolein	ND		20	10	ug/L			01/09/20 15:22	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 15:22	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 15:22	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 15:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 15:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 15:22	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/09/20 15:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 15:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 15:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 15:22	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 15:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 15:22	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 15:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 15:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 15:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 15:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 15:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 15:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 15:22	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 15:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 15:22	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 15:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 15:22	1
Methyl tert-butyl ether	1.7		1.0	0.74	ug/L			01/09/20 15:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 15:22	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 15:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 15:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 15:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 15:22	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 15:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 15:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 15:22	1

Client Sample ID: MW13-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 15:22	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 15:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 15:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 15:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 15:22	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 15:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 15:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 15:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 15:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 15:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 15:22	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 15:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 15:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 15:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 15:22	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 15:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 15:22	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*01/09/20 15:22*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/09/20 15:22*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/09/20 15:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.1		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/14/20 10:35	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:35	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1
2-Methylnaphthalene	1.7		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*72*		*33 - 138*	*01/08/20 10:16*	*01/14/20 10:35*	*1*
2-Fluorobiphenyl	*119*		*15 - 122*	*01/08/20 10:16*	*01/14/20 10:35*	*1*
Nitrobenzene-d5	*94*		*19 - 130*	*01/08/20 10:16*	*01/14/20 10:35*	*1*

Client Sample Results

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

Job ID: 400-182185-1

Client Sample ID: MW13-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-13
Matrix: Water

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	6.2		0.19	0.019	ug/L		01/08/20 10:16	01/16/20 11:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/08/20 10:16	01/10/20 21:50	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		01/08/20 10:16	01/10/20 21:50	1
Benzoic acid	ND	* UJ	28	6.9	ug/L		01/08/20 10:16	01/10/20 21:50	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/08/20 10:16	01/10/20 21:50	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		01/08/20 10:16	01/10/20 21:50	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		01/08/20 10:16	01/10/20 21:50	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		01/08/20 10:16	01/10/20 21:50	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/08/20 10:16	01/10/20 21:50	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		01/08/20 10:16	01/10/20 21:50	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		01/08/20 10:16	01/10/20 21:50	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/08/20 10:16	01/10/20 21:50	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/08/20 10:16	01/10/20 21:50	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		01/08/20 10:16	01/10/20 21:50	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/08/20 10:16	01/10/20 21:50	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/08/20 10:16	01/10/20 21:50	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		01/08/20 10:16	01/10/20 21:50	1
Dibenzofuran	ND		9.5	0.49	ug/L		01/08/20 10:16	01/10/20 21:50	1
3,3'-Dichlorobenzidine	ND	*	9.5	2.5	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/08/20 10:16	01/10/20 21:50	1
Diethyl phthalate	ND		9.5	0.66	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/08/20 10:16	01/10/20 21:50	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		01/08/20 10:16	01/10/20 21:50	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/08/20 10:16	01/10/20 21:50	1
4,6-Dinitro-ortho-cresol	ND	*	9.5	1.9	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,4-Dinitrophenol	ND	* UJ	28	3.2	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/08/20 10:16	01/10/20 21:50	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		01/08/20 10:16	01/10/20 21:50	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/08/20 10:16	01/10/20 21:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/08/20 10:16	01/10/20 21:50	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		01/08/20 10:16	01/10/20 21:50	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 21:50	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/08/20 10:16	01/10/20 21:50	1
Indene	ND		9.5	0.95	ug/L		01/08/20 10:16	01/10/20 21:50	1
Isophorone	ND		9.5	0.54	ug/L		01/08/20 10:16	01/10/20 21:50	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/08/20 10:16	01/10/20 21:50	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/08/20 10:16	01/10/20 21:50	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/08/20 10:16	01/10/20 21:50	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/08/20 10:16	01/10/20 21:50	1
4-Nitroaniline	ND		9.5	2.4	ug/L		01/08/20 10:16	01/10/20 21:50	1
Nitrobenzene	ND		9.5	0.52	ug/L		01/08/20 10:16	01/10/20 21:50	1
2-Nitrophenol	ND	*	9.5	0.62	ug/L		01/08/20 10:16	01/10/20 21:50	1
4-Nitrophenol	ND	* UJ	9.5	2.0	ug/L		01/08/20 10:16	01/10/20 21:50	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/08/20 10:16	01/10/20 21:50	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/08/20 10:16	01/10/20 21:50	1

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

Job ID: 400-182185-1

Client Sample ID: MW13-ROX-010620
Date Collected: 01/06/20 11:10
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		01/08/20 10:16	01/10/20 21:50	1
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	01/10/20 21:50	1
Phenol	ND		9.5	2.5	ug/L		01/08/20 10:16	01/10/20 21:50	1
Pyridine	ND		9.5	3.0	ug/L		01/08/20 10:16	01/10/20 21:50	1
Quinoline	ND	uJ	9.5	5.7	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/08/20 10:16	01/10/20 21:50	1
2,4,6-Trichlorophenol	ND	*	9.5	3.3	ug/L		01/08/20 10:16	01/10/20 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*01/08/20 10:16*	*01/10/20 21:50*	*1*
2-Fluorophenol	*45*		*10 - 120*	*01/08/20 10:16*	*01/10/20 21:50*	*1*
Nitrobenzene-d5	*80*		*27 - 120*	*01/08/20 10:16*	*01/10/20 21:50*	*1*
Phenol-d5	*67*		*10 - 120*	*01/08/20 10:16*	*01/10/20 21:50*	*1*
Terphenyl-d14	*56*		*53 - 125*	*01/08/20 10:16*	*01/10/20 21:50*	*1*
2,4,6-Tribromophenol	*97*		*15 - 135*	*01/08/20 10:16*	*01/10/20 21:50*	*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		01/09/20 09:57	01/10/20 19:26	1
1,2-Dibromoethane	ND	*	0.022	0.0056	ug/L		01/09/20 09:57	01/10/20 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*01/09/20 09:57*	*01/10/20 19:26*	*1*

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

Job ID: 400-182185-1

Client Sample ID: MW22-ROX-010620
Date Collected: 01/06/20 12:35
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 15:49	1
Acrolein	ND		20	10	ug/L			01/09/20 15:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 15:49	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 15:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 15:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 15:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 15:49	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/09/20 15:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 15:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 15:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 15:49	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 15:49	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 15:49	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 15:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 15:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 15:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 15:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 15:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Ethylbenzene	16		1.0	0.50	ug/L			01/09/20 15:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 15:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 15:49	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 15:49	1
Isopropylbenzene	0.64	J	1.0	0.53	ug/L			01/09/20 15:49	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 15:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 15:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 15:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 15:49	1
m-Xylene & p-Xylene	8.9		5.0	1.6	ug/L			01/09/20 15:49	1
Naphthalene	1.8		1.0	1.0	ug/L			01/09/20 15:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 15:49	1
N-Propylbenzene	0.96	J	1.0	0.69	ug/L			01/09/20 15:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 15:49	1
o-Xylene	0.99	J	5.0	0.60	ug/L			01/09/20 15:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 15:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 15:49	1

Client Sample ID: MW22-ROX-010620
Date Collected: 01/06/20 12:35
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 15:49	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 15:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 15:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 15:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 15:49	1
Toluene	0.43	J	1.0	0.41	ug/L			01/09/20 15:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 15:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 15:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 15:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 15:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 15:49	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 15:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 15:49	1
1,2,4-Trimethylbenzene	5.0		1.0	0.82	ug/L			01/09/20 15:49	1
1,3,5-Trimethylbenzene	0.60	J	1.0	0.56	ug/L			01/09/20 15:49	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 15:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 15:49	1
Xylenes, Total	9.9	J	10	1.6	ug/L			01/09/20 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*78 - 118*		*01/09/20 15:49*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/09/20 15:49*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/09/20 15:49*	*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	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/14/20 10:53	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/14/20 10:53	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1
2-Methylnaphthalene	0.30		0.19	0.019	ug/L		01/08/20 10:16	01/14/20 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*33 - 138*	*01/08/20 10:16*	*01/14/20 10:53*	*1*
2-Fluorobiphenyl	*87*		*15 - 122*	*01/08/20 10:16*	*01/14/20 10:53*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*01/08/20 10:16*	*01/14/20 10:53*	*1*

Client Sample ID: MW22-ROX-010620
Date Collected: 01/06/20 12:35
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-14
Matrix: Water

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	0.38		0.19	0.019	ug/L		01/08/20 10:16	01/16/20 11:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 22:11	1
Benzenethiol	ND *	UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 22:11	1
Benzoic acid	ND *	UJ	29	7.0	ug/L		01/08/20 10:16	01/10/20 22:11	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 22:11	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 22:11	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 22:11	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/08/20 10:16	01/10/20 22:11	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 22:11	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 22:11	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 22:11	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 22:11	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 22:11	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 22:11	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 22:11	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 22:11	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 22:11	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 22:11	1
3,3'-Dichlorobenzidine	ND *		9.6	2.5	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 22:11	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 22:11	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/08/20 10:16	01/10/20 22:11	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 22:11	1
4,6-Dinitro-ortho-cresol	ND *		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,4-Dinitrophenol	ND *	UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 22:11	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 22:11	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 22:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 22:11	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 22:11	1
Hexachlorocyclopentadiene	ND *	UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 22:11	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 22:11	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 22:11	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 22:11	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 22:11	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/08/20 10:16	01/10/20 22:11	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 22:11	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 22:11	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 22:11	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 22:11	1
2-Nitrophenol	ND *		9.6	0.62	ug/L		01/08/20 10:16	01/10/20 22:11	1
4-Nitrophenol	ND *	UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 22:11	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 22:11	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 22:11	1

Client Sample ID: MW22-ROX-010620
Date Collected: 01/06/20 12:35
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 22:11	1
Pentachlorophenol	2.3	J *	19	1.7	ug/L		01/08/20 10:16	01/10/20 22:11	1
Phenol	ND		9.6	2.5	ug/L		01/08/20 10:16	01/10/20 22:11	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 22:11	1
Quinoline	ND	U5	9.6	5.7	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/08/20 10:16	01/10/20 22:11	1
2,4,6-Trichlorophenol	ND	*	9.6	3.3	ug/L		01/08/20 10:16	01/10/20 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 120*	*01/08/20 10:16*	*01/10/20 22:11*	*1*
2-Fluorophenol	*45*		*10 - 120*	*01/08/20 10:16*	*01/10/20 22:11*	*1*
Nitrobenzene-d5	*90*		*27 - 120*	*01/08/20 10:16*	*01/10/20 22:11*	*1*
Phenol-d5	*68*		*10 - 120*	*01/08/20 10:16*	*01/10/20 22:11*	*1*
Terphenyl-d14	*78*		*53 - 125*	*01/08/20 10:16*	*01/10/20 22:11*	*1*
2,4,6-Tribromophenol	*91*		*15 - 135*	*01/08/20 10:16*	*01/10/20 22:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND	H U5	19	1.7	ug/L		02/06/20 09:55	02/06/20 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*		*34 - 120*	*02/06/20 09:55*	*02/06/20 18:48*	*1*
2-Fluorophenol	*47*		*10 - 120*	*02/06/20 09:55*	*02/06/20 18:48*	*1*
Nitrobenzene-d5	*60*		*27 - 120*	*02/06/20 09:55*	*02/06/20 18:48*	*1*
Phenol-d5	*47*		*10 - 120*	*02/06/20 09:55*	*02/06/20 18:48*	*1*
Terphenyl-d14	*46*	*X*	*53 - 125*	*02/06/20 09:55*	*02/06/20 18:48*	*1*
2,4,6-Tribromophenol	*46*		*15 - 135*	*02/06/20 09:55*	*02/06/20 18:48*	*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		01/10/20 09:24	01/17/20 16:18	1
1,2-Dibromoethane	ND		0.021	0.0054	ug/L		01/10/20 09:24	01/17/20 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*01/10/20 09:24*	*01/17/20 16:18*	*1*

Client Sample ID: MW5-ROX-010620
Date Collected: 01/06/20 13:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 16:16	1
Acrolein	ND		20	10	ug/L			01/09/20 16:16	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 16:16	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 16:16	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 16:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 16:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 16:16	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/09/20 16:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 16:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 16:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 16:16	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 16:16	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 16:16	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 16:16	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 16:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 16:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 16:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 16:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 16:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 16:16	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 16:16	1
Isopropylbenzene	0.71	J	1.0	0.53	ug/L			01/09/20 16:16	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 16:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 16:16	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 16:16	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 16:16	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 16:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 16:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 16:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 16:16	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 16:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 16:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 16:16	1

Client Sample ID: MW5-ROX-010620
Date Collected: 01/06/20 13:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 16:16	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 16:16	1
tert-Butylbenzene	1.2		1.0	0.63	ug/L			01/09/20 16:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 16:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 16:16	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 16:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 16:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 16:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 16:16	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 16:16	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 16:16	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 16:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 16:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 16:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 16:16	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 16:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 16:16	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*01/09/20 16:16*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/09/20 16:16*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/09/20 16:16*	*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	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
Anthracene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Chrysene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Fluoranthene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
Fluorene	ND		0.19	0.020	ug/L		01/08/20 10:16	01/13/20 17:51	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/08/20 10:16	01/13/20 17:51	1
Phenanthrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
Pyrene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/08/20 10:16	01/13/20 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*47*		*33 - 138*	*01/08/20 10:16*	*01/13/20 17:51*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*01/08/20 10:16*	*01/13/20 17:51*	*1*

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*54*		*19 - 130*	*01/08/20 10:16*	*01/13/20 17:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/08/20 10:16	01/10/20 22:32	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/08/20 10:16	01/10/20 22:32	1
Benzoic acid	ND	* UJ	29	7.0	ug/L		01/08/20 10:16	01/10/20 22:32	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 22:32	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 22:32	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/08/20 10:16	01/10/20 22:32	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/08/20 10:16	01/10/20 22:32	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/08/20 10:16	01/10/20 22:32	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/08/20 10:16	01/10/20 22:32	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/08/20 10:16	01/10/20 22:32	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/08/20 10:16	01/10/20 22:32	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/08/20 10:16	01/10/20 22:32	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 22:32	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 22:32	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/08/20 10:16	01/10/20 22:32	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 22:32	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/08/20 10:16	01/10/20 22:32	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/08/20 10:16	01/10/20 22:32	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/08/20 10:16	01/10/20 22:32	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/08/20 10:16	01/10/20 22:32	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/08/20 10:16	01/10/20 22:32	1
4,6-Dinitro-ortho-cresol	ND	*	9.6	1.9	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/08/20 10:16	01/10/20 22:32	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/08/20 10:16	01/10/20 22:32	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 22:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 22:32	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/08/20 10:16	01/10/20 22:32	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		01/08/20 10:16	01/10/20 22:32	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/08/20 10:16	01/10/20 22:32	1
Indene	ND		9.6	0.96	ug/L		01/08/20 10:16	01/10/20 22:32	1
Isophorone	ND		9.6	0.55	ug/L		01/08/20 10:16	01/10/20 22:32	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 22:32	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/08/20 10:16	01/10/20 22:32	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/08/20 10:16	01/10/20 22:32	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/08/20 10:16	01/10/20 22:32	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/08/20 10:16	01/10/20 22:32	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/08/20 10:16	01/10/20 22:32	1
2-Nitrophenol	ND	*	9.6	0.62	ug/L		01/08/20 10:16	01/10/20 22:32	1
4-Nitrophenol	ND	* UJ	9.6	2.0	ug/L		01/08/20 10:16	01/10/20 22:32	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/08/20 10:16	01/10/20 22:32	1

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

Job ID: 400-182185-1

Client Sample ID: MW5-ROX-010620
Date Collected: 01/06/20 13:20
Date Received: 01/07/20 08:46

Lab Sample ID: 400-182185-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/08/20 10:16	01/10/20 22:32	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/08/20 10:16	01/10/20 22:32	1
Pentachlorophenol	ND	*	19	1.7	ug/L		01/08/20 10:16	01/10/20 22:32	1
Phenol	ND		9.6	2.5	ug/L		01/08/20 10:16	01/10/20 22:32	1
Pyridine	ND		9.6	3.1	ug/L		01/08/20 10:16	01/10/20 22:32	1
Quinoline	ND	U3	9.6	5.8	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/08/20 10:16	01/10/20 22:32	1
2,4,6-Trichlorophenol	ND	*	9.6	3.4	ug/L		01/08/20 10:16	01/10/20 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*01/08/20 10:16*	*01/10/20 22:32*	*1*
2-Fluorophenol	*41*		*10 - 120*	*01/08/20 10:16*	*01/10/20 22:32*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*01/08/20 10:16*	*01/10/20 22:32*	*1*
Phenol-d5	*60*		*10 - 120*	*01/08/20 10:16*	*01/10/20 22:32*	*1*
Terphenyl-d14	*72*		*53 - 125*	*01/08/20 10:16*	*01/10/20 22:32*	*1*
2,4,6-Tribromophenol	*75*		*15 - 135*	*01/08/20 10:16*	*01/10/20 22:32*	*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	*	0.031	0.0058	ug/L		01/09/20 09:57	01/16/20 23:24	1
1,2-Dibromoethane	ND	*	0.021	0.0052	ug/L		01/09/20 09:57	01/16/20 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*01/09/20 09:57*	*01/16/20 23:24*	*1*

Definitions/Glossary

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

Job ID: 400-182185-1

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
*	RPD of the LCS and LCSD exceeds the control limits
*	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 is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the 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: 400-182185-1

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)
400-182185-1	TB-ROX-010620-8260-A	89	104	110
400-182185-3	MW4-ROX-010620-EB	88	103	104
400-182185-4	MW4-ROX-010620	85	101	109
400-182185-5	MW25-ROX-010620	86	105	106
400-182185-6	MW8-ROX-010620	85	104	110
400-182185-7	MW7-ROX-010620	87	106	99
400-182185-8	MW7-ROX-010620-DUP	89	107	99
400-182185-9	TB-ROX-010620-8260-B	87	104	107
400-182185-11	P114R-ROX-010620-EB	88	105	100
400-182185-12	P114R-ROX-010620	88	95	106
400-182185-13	MW13-ROX-010620	90	105	109
400-182185-14	MW22-ROX-010620	88	105	110
400-182185-15	MW5-ROX-010620	90	105	108
LCS 400-473366/1002	Lab Control Sample	87	105	105
LCS 400-473519/1002	Lab Control Sample	81	103	109
MB 400-473366/14	Method Blank	85	102	105
MB 400-473519/5	Method Blank	88	104	112

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)
400-182185-3	MW4-ROX-010620-EB	72	25	86	49	73	52
400-182185-4	MW4-ROX-010620	76	38	83	66	77	83
400-182185-5	MW25-ROX-010620	70	45	84	57	51 X	65
400-182185-6	MW8-ROX-010620	77	29	83	63	64	86
400-182185-7	MW7-ROX-010620	73	40	86	73	61	109
400-182185-8	MW7-ROX-010620-DUP	70	39	87	73	54	98
400-182185-11	P114R-ROX-010620-EB	71	30	84	21	69	20
400-182185-12	P114R-ROX-010620	67	45	83	65	50 X	80
400-182185-12 - RERA	P114R-ROX-010620	53	54	70	57	50 X	54
400-182185-13	MW13-ROX-010620	78	45	80	67	56	97
400-182185-14	MW22-ROX-010620	77	45	90	68	78	91
400-182185-14 - RERA	MW22-ROX-010620	45	47	60	47	46 X	46
400-182185-15	MW5-ROX-010620	74	41	76	60	72	75
LCS 400-473251/2-A	Lab Control Sample	77	61	89	71	93	63
LCS 400-473251/4-A	Lab Control Sample	87	45	101	76	112	28
LCS 400-476781/2-A	Lab Control Sample	62	65	93	72	72	61
LCSD 400-473251/3-A	Lab Control Sample Dup	82	54	93	80	90	84
LCSD 400-473251/5-A	Lab Control Sample Dup	81	57	96	85	110	74
LCSD 400-476781/3-A	Lab Control Sample Dup	58	62	89	68	69	54
MB 400-473251/1-A	Method Blank	76	19	87	58	109	22
MB 400-476781/1-A	Method Blank	51	52	68	57	69	45

Surrogate Summary

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

Job ID: 400-182185-1

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)
400-182185-3	MW4-ROX-010620-EB	65	91	121
400-182185-4	MW4-ROX-010620	77	112	117
400-182185-5	MW25-ROX-010620	50	101	123
400-182185-6	MW8-ROX-010620	67	76	105
400-182185-7	MW7-ROX-010620	73	96	117
400-182185-8	MW7-ROX-010620-DUP	64	103	106
400-182185-11	P114R-ROX-010620-EB	73	105	101
400-182185-12	P114R-ROX-010620	53	84	79
400-182185-13	MW13-ROX-010620	72	119	94
400-182185-14	MW22-ROX-010620	81	87	79
400-182185-15	MW5-ROX-010620	47	73	54
LCS 400-473251/2-A	Lab Control Sample	79	88	100
LCSD 400-473251/3-A	Lab Control Sample Dup	85	96	103
MB 400-473251/1-A	Method Blank	102	110	115

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)
400-182185-2	TB-ROX-010620-8011-A	97
400-182185-3	MW4-ROX-010620-EB	122
400-182185-4	MW4-ROX-010620	76
400-182185-5	MW25-ROX-010620	107
400-182185-6	MW8-ROX-010620	95
400-182185-7	MW7-ROX-010620	108
400-182185-8	MW7-ROX-010620-DUP	93
400-182185-10	TB-ROX-010620-8011-B	129
400-182185-11	P114R-ROX-010620-EB	88
400-182185-12	P114R-ROX-010620	117
400-182185-13	MW13-ROX-010620	98
400-182185-14	MW22-ROX-010620	103
400-182185-15	MW5-ROX-010620	98
LCS 400-473412/2-A	Lab Control Sample	93
LCS 400-473543/2-A	Lab Control Sample	126
LCSD 400-473412/3-A	Lab Control Sample Dup	70
LCSD 400-473543/3-A	Lab Control Sample Dup	124

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-182185-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
MB 400-473412/1-A	Method Blank	89
MB 400-473543/1-A	Method Blank	111

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-182185-1

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: 400-182185-1

Client Sample ID: TB-ROX-010620-8260-A

Lab Sample ID: 400-182185-1

Date Collected: 01/06/20 00:00
Date Received: 01/07/20 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	473366	01/09/20 12:37	RS	TAL PEN

Client Sample ID: TB-ROX-010620-8011-A

Lab Sample ID: 400-182185-2

Date Collected: 01/06/20 00:00
Date Received: 01/07/20 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			29.9 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 17:23	DS	TAL PEN

Client Sample ID: MW4-ROX-010620-EB

Lab Sample ID: 400-182185-3

Date Collected: 01/06/20 08:20
Date Received: 01/07/20 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	473519	01/10/20 12:32	RS	TAL PEN
Total/NA	Prep	3520C			1045.9 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 19:00	VC1	TAL PEN
Total/NA	Prep	3520C			1045.9 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 17:27	KJA	TAL PEN
Total/NA	Prep	8011			30.8 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 14:57	DS	TAL PEN

Client Sample ID: MW4-ROX-010620

Lab Sample ID: 400-182185-4

Date Collected: 01/06/20 09:15
Date Received: 01/07/20 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	473366	01/09/20 13:33	RS	TAL PEN
Total/NA	Prep	3520C	RA		1044.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	RA	1			476857	02/06/20 12:38	VC1	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 19:21	VC1	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 17:45	KJA	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 17:44	DS	TAL PEN

Client Sample ID: MW25-ROX-010620

Lab Sample ID: 400-182185-5

Date Collected: 01/06/20 10:05
Date Received: 01/07/20 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	473366	01/09/20 14:00	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: MW25-ROX-010620

Lab Sample ID: 400-182185-5

Date Collected: 01/06/20 10:05
Matrix: Water
Date Received: 01/07/20 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1044.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 19:43	VC1	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 18:03	KJA	TAL PEN
Total/NA	Prep	8011			30 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 15:38	DS	TAL PEN

Client Sample ID: MW8-ROX-010620

Lab Sample ID: 400-182185-6

Date Collected: 01/06/20 11:10
Matrix: Water
Date Received: 01/07/20 08:46

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	473366	01/09/20 16:43	RS	TAL PEN
Total/NA	Prep	3520C	RA		1037.6 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	RA	1			476857	02/06/20 13:02	VC1	TAL PEN
Total/NA	Prep	3520C			1037.6 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 20:04	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1037.6 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	DL	5			474338	01/16/20 17:56	DS	TAL PEN
Total/NA	Prep	3520C			1037.6 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 18:21	KJA	TAL PEN
Total/NA	Prep	8011			31.3 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 18:24	DS	TAL PEN

Client Sample ID: MW7-ROX-010620

Lab Sample ID: 400-182185-7

Date Collected: 01/06/20 12:45
Matrix: Water
Date Received: 01/07/20 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5000	5 mL	5 mL	473366	01/09/20 17:10	RS	TAL PEN
Total/NA	Prep	3520C	RA		1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	RA	1			476857	02/06/20 13:27	VC1	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 20:25	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	DL	5			474338	01/16/20 18:21	DS	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 18:39	KJA	TAL PEN
Total/NA	Prep	8011			32.7 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 15:58	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: MW7-ROX-010620-DUP

Lab Sample ID: 400-182185-8

Date Collected: 01/06/20 12:45
Date Received: 01/07/20 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		5000	5 mL	5 mL	473366	01/09/20 17:36	RS	TAL PEN
Total/NA	Prep	3520C	RA		1041 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	RA	1			476857	02/06/20 13:51	VC1	TAL PEN
Total/NA	Prep	3520C			1041 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 20:46	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1041 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	DL	5			474338	01/16/20 18:47	DS	TAL PEN
Total/NA	Prep	3520C			1041 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 18:57	KJA	TAL PEN
Total/NA	Prep	8011			30.5 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 18:45	DS	TAL PEN

Client Sample ID: TB-ROX-010620-8260-B

Lab Sample ID: 400-182185-9

Date Collected: 01/06/20 00:00
Date Received: 01/07/20 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	473366	01/09/20 13:06	RS	TAL PEN

Client Sample ID: TB-ROX-010620-8011-B

Lab Sample ID: 400-182185-10

Date Collected: 01/06/20 00:00
Date Received: 01/07/20 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			32.3 mL	35 mL	473543	01/10/20 09:40	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 16:59	DS	TAL PEN

Client Sample ID: P114R-ROX-010620-EB

Lab Sample ID: 400-182185-11

Date Collected: 01/06/20 08:30
Date Received: 01/07/20 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	473519	01/10/20 12:04	RS	TAL PEN
Total/NA	Prep	3520C			1035.4 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 21:07	VC1	TAL PEN
Total/NA	Prep	3520C			1035.4 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 19:15	KJA	TAL PEN
Total/NA	Prep	8011			32.4 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 19:05	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: P114R-ROX-010620

Lab Sample ID: 400-182185-12

Date Collected: 01/06/20 10:20
Date Received: 01/07/20 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	473366	01/09/20 14:54	RS	TAL PEN
Total/NA	Prep	3520C	RERA		1026.4 mL	1 mL	476781	02/06/20 09:55	JRW	TAL PEN
Total/NA	Analysis	8270D	RERA	1			476960	02/06/20 18:22	VC1	TAL PEN
Total/NA	Prep	3520C			1052.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 21:29	VC1	TAL PEN
Total/NA	Prep	3520C			1052.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 10:18	PP1	TAL PEN
Total/NA	Prep	8011			31.1 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 16:39	DS	TAL PEN

Client Sample ID: MW13-ROX-010620

Lab Sample ID: 400-182185-13

Date Collected: 01/06/20 11:10
Date Received: 01/07/20 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	473366	01/09/20 15:22	RS	TAL PEN
Total/NA	Prep	3520C			1052.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 21:50	VC1	TAL PEN
Total/NA	Prep	3520C			1052.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 10:35	PP1	TAL PEN
Total/NA	Prep	3520C	RA		1052.8 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			474274	01/16/20 11:13	PP1	TAL PEN
Total/NA	Prep	8011			31.4 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 19:26	DS	TAL PEN

Client Sample ID: MW22-ROX-010620

Lab Sample ID: 400-182185-14

Date Collected: 01/06/20 12:35
Date Received: 01/07/20 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	473366	01/09/20 15:49	RS	TAL PEN
Total/NA	Prep	3520C	RERA		1040.2 mL	1 mL	476781	02/06/20 09:55	JRW	TAL PEN
Total/NA	Analysis	8270D	RERA	1			476960	02/06/20 18:48	VC1	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 22:11	VC1	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 10:53	PP1	TAL PEN
Total/NA	Prep	3520C	RA		1045.2 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			474274	01/16/20 11:32	PP1	TAL PEN
Total/NA	Prep	8011			32.7 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 16:18	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: MW5-ROX-010620

Lab Sample ID: 400-182185-15

Date Collected: 01/06/20 13:20
Matrix: Water
Date Received: 01/07/20 08:46

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	473366	01/09/20 16:16	RS	TAL PEN
Total/NA	Prep	3520C			1041 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 22:32	VC1	TAL PEN
Total/NA	Prep	3520C			1041 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473827	01/13/20 17:51	PP1	TAL PEN
Total/NA	Prep	8011			33.4 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			474311	01/16/20 23:24	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473251/1-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	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 16:31	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			473559	01/10/20 16:33	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473366/14

Date Collected: N/A
Matrix: Water
Date Received: 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	473366	01/09/20 08:35	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473412/1-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	473412	01/09/20 09:56	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 13:45	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473519/5

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	473519	01/10/20 08:56	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473543/1-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	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 07:43	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-476781/1-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	476781	02/05/20 15:05	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/06/20 17:04	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473251/2-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	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 16:53	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1000 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D	RA	1			474338	01/16/20 15:23	DS	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			473559	01/10/20 16:51	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473251/4-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	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 17:35	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473366/1002

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	473366	01/09/20 07:34	RS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473412/2-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	473412	01/09/20 09:56	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 14:06	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-473519/1002**
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	473519	01/10/20 07:56	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-473543/2-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	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 09:15	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-476781/2-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	476781	02/05/20 15:05	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/06/20 17:31	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-473251/3-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	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 17:14	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			473559	01/10/20 17:09	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-473251/5-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	473251	01/08/20 10:16	JRW	TAL PEN
Total/NA	Analysis	8270D		1			473656	01/10/20 17:56	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-473412/3-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	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 14:26	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182185-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-473543/3-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	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 09:35	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-476781/3-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	476781	02/05/20 15:05	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/06/20 17:57	VC1	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: 400-182185-1

GC/MS VOA

Analysis Batch: 473366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-1	TB-ROX-010620-8260-A	Total/NA	Water	8260B	
400-182185-4	MW4-ROX-010620	Total/NA	Water	8260B	
400-182185-5	MW25-ROX-010620	Total/NA	Water	8260B	
400-182185-6	MW8-ROX-010620	Total/NA	Water	8260B	
400-182185-7	MW7-ROX-010620	Total/NA	Water	8260B	
400-182185-8	MW7-ROX-010620-DUP	Total/NA	Water	8260B	
400-182185-9	TB-ROX-010620-8260-B	Total/NA	Water	8260B	
400-182185-12	P114R-ROX-010620	Total/NA	Water	8260B	
400-182185-13	MW13-ROX-010620	Total/NA	Water	8260B	
400-182185-14	MW22-ROX-010620	Total/NA	Water	8260B	
400-182185-15	MW5-ROX-010620	Total/NA	Water	8260B	
MB 400-473366/14	Method Blank	Total/NA	Water	8260B	
LCS 400-473366/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 473519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-3	MW4-ROX-010620-EB	Total/NA	Water	8260B	
400-182185-11	P114R-ROX-010620-EB	Total/NA	Water	8260B	
MB 400-473519/5	Method Blank	Total/NA	Water	8260B	
LCS 400-473519/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 473251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-3	MW4-ROX-010620-EB	Total/NA	Water	3520C	
400-182185-4	MW4-ROX-010620	Total/NA	Water	3520C	
400-182185-4 - RA	MW4-ROX-010620	Total/NA	Water	3520C	
400-182185-5	MW25-ROX-010620	Total/NA	Water	3520C	
400-182185-6	MW8-ROX-010620	Total/NA	Water	3520C	
400-182185-6 - RA	MW8-ROX-010620	Total/NA	Water	3520C	
400-182185-6 - DL	MW8-ROX-010620	Total/NA	Water	3520C	
400-182185-7	MW7-ROX-010620	Total/NA	Water	3520C	
400-182185-7 - RA	MW7-ROX-010620	Total/NA	Water	3520C	
400-182185-7 - DL	MW7-ROX-010620	Total/NA	Water	3520C	
400-182185-8	MW7-ROX-010620-DUP	Total/NA	Water	3520C	
400-182185-8 - RA	MW7-ROX-010620-DUP	Total/NA	Water	3520C	
400-182185-8 - DL	MW7-ROX-010620-DUP	Total/NA	Water	3520C	
400-182185-11	P114R-ROX-010620-EB	Total/NA	Water	3520C	
400-182185-12	P114R-ROX-010620	Total/NA	Water	3520C	
400-182185-13	MW13-ROX-010620	Total/NA	Water	3520C	
400-182185-13 - RA	MW13-ROX-010620	Total/NA	Water	3520C	
400-182185-14	MW22-ROX-010620	Total/NA	Water	3520C	
400-182185-14 - RA	MW22-ROX-010620	Total/NA	Water	3520C	
400-182185-15	MW5-ROX-010620	Total/NA	Water	3520C	
MB 400-473251/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-473251/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-473251/2-A - RA	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-473251/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-473251/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-473251/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

QC Association Summary

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

Job ID: 400-182185-1

GC/MS Semi VOA

Analysis Batch: 473559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-3	MW4-ROX-010620-EB	Total/NA	Water	8270D LL	473251
400-182185-4	MW4-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-5	MW25-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-6	MW8-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-7	MW7-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-8	MW7-ROX-010620-DUP	Total/NA	Water	8270D LL	473251
400-182185-11	P114R-ROX-010620-EB	Total/NA	Water	8270D LL	473251
MB 400-473251/1-A	Method Blank	Total/NA	Water	8270D LL	473251
LCS 400-473251/2-A	Lab Control Sample	Total/NA	Water	8270D LL	473251
LCSD 400-473251/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	473251

Analysis Batch: 473656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-3	MW4-ROX-010620-EB	Total/NA	Water	8270D	473251
400-182185-4	MW4-ROX-010620	Total/NA	Water	8270D	473251
400-182185-5	MW25-ROX-010620	Total/NA	Water	8270D	473251
400-182185-6	MW8-ROX-010620	Total/NA	Water	8270D	473251
400-182185-7	MW7-ROX-010620	Total/NA	Water	8270D	473251
400-182185-8	MW7-ROX-010620-DUP	Total/NA	Water	8270D	473251
400-182185-11	P114R-ROX-010620-EB	Total/NA	Water	8270D	473251
400-182185-12	P114R-ROX-010620	Total/NA	Water	8270D	473251
400-182185-13	MW13-ROX-010620	Total/NA	Water	8270D	473251
400-182185-14	MW22-ROX-010620	Total/NA	Water	8270D	473251
400-182185-15	MW5-ROX-010620	Total/NA	Water	8270D	473251
MB 400-473251/1-A	Method Blank	Total/NA	Water	8270D	473251
LCS 400-473251/2-A	Lab Control Sample	Total/NA	Water	8270D	473251
LCS 400-473251/4-A	Lab Control Sample	Total/NA	Water	8270D	473251
LCSD 400-473251/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	473251
LCSD 400-473251/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	473251

Analysis Batch: 473827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-15	MW5-ROX-010620	Total/NA	Water	8270D LL	473251

Analysis Batch: 473920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-12	P114R-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-13	MW13-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-14	MW22-ROX-010620	Total/NA	Water	8270D LL	473251

Analysis Batch: 474274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-13 - RA	MW13-ROX-010620	Total/NA	Water	8270D LL	473251
400-182185-14 - RA	MW22-ROX-010620	Total/NA	Water	8270D LL	473251

Analysis Batch: 474338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-6 - DL	MW8-ROX-010620	Total/NA	Water	8270D	473251
400-182185-7 - DL	MW7-ROX-010620	Total/NA	Water	8270D	473251
400-182185-8 - DL	MW7-ROX-010620-DUP	Total/NA	Water	8270D	473251
LCS 400-473251/2-A - RA	Lab Control Sample	Total/NA	Water	8270D	473251

QC Association Summary

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

Job ID: 400-182185-1

GC/MS Semi VOA

Prep Batch: 476781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-12 - RERA	P114R-ROX-010620	Total/NA	Water	3520C	
400-182185-14 - RERA	MW22-ROX-010620	Total/NA	Water	3520C	
MB 400-476781/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476781/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476781/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 476857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-4 - RA	MW4-ROX-010620	Total/NA	Water	8270D	473251
400-182185-6 - RA	MW8-ROX-010620	Total/NA	Water	8270D	473251
400-182185-7 - RA	MW7-ROX-010620	Total/NA	Water	8270D	473251
400-182185-8 - RA	MW7-ROX-010620-DUP	Total/NA	Water	8270D	473251

Analysis Batch: 476960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-12 - RERA	P114R-ROX-010620	Total/NA	Water	8270D	476781
400-182185-14 - RERA	MW22-ROX-010620	Total/NA	Water	8270D	476781
MB 400-476781/1-A	Method Blank	Total/NA	Water	8270D	476781
LCS 400-476781/2-A	Lab Control Sample	Total/NA	Water	8270D	476781
LCSD 400-476781/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	476781

GC Semi VOA

Prep Batch: 473412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-2	TB-ROX-010620-8011-A	Total/NA	Water	8011	
400-182185-4	MW4-ROX-010620	Total/NA	Water	8011	
400-182185-6	MW8-ROX-010620	Total/NA	Water	8011	
400-182185-8	MW7-ROX-010620-DUP	Total/NA	Water	8011	
400-182185-11	P114R-ROX-010620-EB	Total/NA	Water	8011	
400-182185-13	MW13-ROX-010620	Total/NA	Water	8011	
400-182185-15	MW5-ROX-010620	Total/NA	Water	8011	
MB 400-473412/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473412/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473412/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Prep Batch: 473543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-3	MW4-ROX-010620-EB	Total/NA	Water	8011	
400-182185-5	MW25-ROX-010620	Total/NA	Water	8011	
400-182185-7	MW7-ROX-010620	Total/NA	Water	8011	
400-182185-10	TB-ROX-010620-8011-B	Total/NA	Water	8011	
400-182185-12	P114R-ROX-010620	Total/NA	Water	8011	
400-182185-14	MW22-ROX-010620	Total/NA	Water	8011	
MB 400-473543/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473543/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473543/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 473595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-2	TB-ROX-010620-8011-A	Total/NA	Water	8011	473412

GC Semi VOA (Continued)

Analysis Batch: 473595 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-4	MW4-ROX-010620	Total/NA	Water	8011	473412
400-182185-6	MW8-ROX-010620	Total/NA	Water	8011	473412
400-182185-8	MW7-ROX-010620-DUP	Total/NA	Water	8011	473412
400-182185-11	P114R-ROX-010620-EB	Total/NA	Water	8011	473412
400-182185-13	MW13-ROX-010620	Total/NA	Water	8011	473412
MB 400-473412/1-A	Method Blank	Total/NA	Water	8011	473412
LCS 400-473412/2-A	Lab Control Sample	Total/NA	Water	8011	473412
LCSD 400-473412/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473412

Analysis Batch: 474311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182185-3	MW4-ROX-010620-EB	Total/NA	Water	8011	473543
400-182185-5	MW25-ROX-010620	Total/NA	Water	8011	473543
400-182185-7	MW7-ROX-010620	Total/NA	Water	8011	473543
400-182185-10	TB-ROX-010620-8011-B	Total/NA	Water	8011	473543
400-182185-12	P114R-ROX-010620	Total/NA	Water	8011	473543
400-182185-14	MW22-ROX-010620	Total/NA	Water	8011	473543
400-182185-15	MW5-ROX-010620	Total/NA	Water	8011	473412
MB 400-473543/1-A	Method Blank	Total/NA	Water	8011	473543
LCS 400-473543/2-A	Lab Control Sample	Total/NA	Water	8011	473543
LCSD 400-473543/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473543

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

Lab Sample ID: MB 400-473366/14
Matrix: Water
Analysis Batch: 473366

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/09/20 08:35	1
Acrolein	ND		20	10	ug/L			01/09/20 08:35	1
Acrylonitrile	ND		10	2.8	ug/L			01/09/20 08:35	1
Benzene	ND		1.0	0.38	ug/L			01/09/20 08:35	1
Bromobenzene	ND		1.0	0.54	ug/L			01/09/20 08:35	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/09/20 08:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Bromoform	ND		5.0	0.71	ug/L			01/09/20 08:35	1
Bromomethane	ND		1.0	0.98	ug/L			01/09/20 08:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/09/20 08:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Chloroethane	ND		1.0	0.76	ug/L			01/09/20 08:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/09/20 08:35	1
Chloroform	ND		1.0	0.60	ug/L			01/09/20 08:35	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/09/20 08:35	1
Chloromethane	ND		1.0	0.83	ug/L			01/09/20 08:35	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 08:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/09/20 08:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/09/20 08:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/09/20 08:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/09/20 08:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/09/20 08:35	1
2-Hexanone	ND		25	3.1	ug/L			01/09/20 08:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/09/20 08:35	1
Methylene bromide	ND		5.0	0.59	ug/L			01/09/20 08:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/09/20 08:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/09/20 08:35	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/09/20 08:35	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/09/20 08:35	1
Naphthalene	ND		1.0	1.0	ug/L			01/09/20 08:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/09/20 08:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/09/20 08:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/09/20 08:35	1
o-Xylene	ND		5.0	0.60	ug/L			01/09/20 08:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/09/20 08:35	1

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

Lab Sample ID: MB 400-473366/14
Matrix: Water
Analysis Batch: 473366

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/09/20 08:35	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/09/20 08:35	1
Styrene	ND		1.0	1.0	ug/L			01/09/20 08:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/09/20 08:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/09/20 08:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/09/20 08:35	1
Toluene	ND		1.0	0.41	ug/L			01/09/20 08:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/09/20 08:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/09/20 08:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/09/20 08:35	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/09/20 08:35	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/09/20 08:35	1
Trichloroethene	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/09/20 08:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/09/20 08:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/09/20 08:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/09/20 08:35	1
Vinyl acetate	ND		25	2.0	ug/L			01/09/20 08:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/09/20 08:35	1
Xylenes, Total	ND		10	1.6	ug/L			01/09/20 08:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*01/09/20 08:35*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*01/09/20 08:35*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/09/20 08:35*	*1*

Lab Sample ID: LCS 400-473366/1002
Matrix: Water
Analysis Batch: 473366

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	110		ug/L		55	43 - 160
Acrolein	500	414		ug/L		83	38 - 160
Acrylonitrile	500	610		ug/L		122	64 - 142
Benzene	50.0	50.3		ug/L		101	70 - 130
Bromobenzene	50.0	44.9		ug/L		90	70 - 132
Bromochloromethane	50.0	54.6		ug/L		109	70 - 130
Bromodichloromethane	50.0	55.3		ug/L		111	67 - 133
Bromoform	50.0	41.6		ug/L		83	57 - 140
Bromomethane	50.0	22.1		ug/L		44	10 - 160
2-Butanone (MEK)	200	132		ug/L		66	61 - 145
Carbon disulfide	50.0	49.9		ug/L		100	61 - 137
Carbon tetrachloride	50.0	55.2		ug/L		110	61 - 137
Chlorobenzene	50.0	48.5		ug/L		97	70 - 130
Dibromochloromethane	50.0	55.5		ug/L		111	67 - 135
Chloroethane	50.0	46.5		ug/L		93	55 - 141

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

Lab Sample ID: LCS 400-473366/1002
Matrix: Water
Analysis Batch: 473366

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	51.2		ug/L		102	69 - 130
1-Chlorohexane	50.0	64.5		ug/L		129	69 - 130
Chloromethane	50.0	50.6		ug/L		101	58 - 137
cis-1,2-Dichloroethene	50.0	58.0		ug/L		116	68 - 130
cis-1,3-Dichloropropene	50.0	56.2		ug/L		112	69 - 132
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 130
Dichlorodifluoromethane	50.0	41.9		ug/L		84	41 - 146
1,1-Dichloroethane	50.0	56.3		ug/L		113	70 - 130
1,2-Dichloroethane	50.0	57.8		ug/L		116	69 - 130
1,1-Dichloroethene	50.0	47.1		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	59.2		ug/L		118	70 - 130
1,3-Dichloropropane	50.0	53.5		ug/L		107	70 - 130
2,2-Dichloropropane	50.0	52.0		ug/L		104	52 - 135
1,1-Dichloropropene	50.0	52.5		ug/L		105	70 - 130
Ethylbenzene	50.0	50.1		ug/L		100	70 - 130
Ethyl methacrylate	50.0	56.9		ug/L		114	68 - 130
Hexachlorobutadiene	50.0	53.3		ug/L		107	53 - 140
2-Hexanone	200	186		ug/L		93	65 - 137
Isopropylbenzene	50.0	55.8		ug/L		112	70 - 130
Methylene bromide	50.0	49.7		ug/L		99	70 - 130
Methylene Chloride	50.0	51.0		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	247		ug/L		124	69 - 138
Methyl tert-butyl ether	50.0	50.7		ug/L		101	66 - 130
m-Xylene & p-Xylene	50.0	49.8		ug/L		100	70 - 130
Naphthalene	50.0	48.8		ug/L		98	47 - 149
n-Butylbenzene	50.0	49.9		ug/L		100	67 - 130
N-Propylbenzene	50.0	46.6		ug/L		93	70 - 130
o-Chlorotoluene	50.0	44.5		ug/L		89	70 - 130
o-Xylene	50.0	51.8		ug/L		104	70 - 130
p-Chlorotoluene	50.0	45.2		ug/L		90	70 - 130
p-Isopropyltoluene	50.0	51.2		ug/L		102	65 - 130
sec-Butylbenzene	50.0	49.1		ug/L		98	66 - 130
Styrene	50.0	52.1		ug/L		104	70 - 130
tert-Butylbenzene	50.0	48.6		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.1		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/L		93	70 - 131
Tetrachloroethene	50.0	50.7		ug/L		101	65 - 130
Toluene	50.0	53.1		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	46.8		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	56.2		ug/L		112	63 - 130
1,2,3-Trichlorobenzene	50.0	50.9		ug/L		102	60 - 138
1,2,4-Trichlorobenzene	50.0	49.6		ug/L		99	60 - 140
1,1,1-Trichloroethane	50.0	50.2		ug/L		100	68 - 130
1,1,2-Trichloroethane	50.0	51.9		ug/L		104	70 - 130
Trichloroethene	50.0	51.4		ug/L		103	70 - 130
Trichlorofluoromethane	50.0	41.6		ug/L		83	65 - 138

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

Lab Sample ID: LCS 400-473366/1002
Matrix: Water
Analysis Batch: 473366

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	47.5		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	50.0	50.7		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	50.0	47.2		ug/L		94	69 - 130
Vinyl acetate	100	84.9		ug/L		85	26 - 160
Vinyl chloride	50.0	51.5		ug/L		103	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: MB 400-473519/5
Matrix: Water
Analysis Batch: 473519

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 08:56	1
Acrolein	ND		20	10	ug/L			01/10/20 08:56	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 08:56	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 08:56	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 08:56	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 08:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 08:56	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 08:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/20 08:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 08:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 08:56	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 08:56	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/10/20 08:56	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 08:56	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 08:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 08:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 08:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 08:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 08:56	1

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

Lab Sample ID: MB 400-473519/5
Matrix: Water
Analysis Batch: 473519

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			01/10/20 08:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 08:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 08:56	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 08:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 08:56	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 08:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 08:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 08:56	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 08:56	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 08:56	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 08:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 08:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 08:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 08:56	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 08:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 08:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 08:56	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 08:56	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 08:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 08:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 08:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 08:56	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 08:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 08:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 08:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 08:56	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 08:56	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 08:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 08:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 08:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 08:56	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 08:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 08:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*78 - 118*		*01/10/20 08:56*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/10/20 08:56*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*01/10/20 08:56*	*1*

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

Lab Sample ID: LCS 400-473519/1002
Matrix: Water
Analysis Batch: 473519

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	105		ug/L		53	43 - 160
Acrolein	500	346		ug/L		69	38 - 160
Acrylonitrile	500	589		ug/L		118	64 - 142
Benzene	50.0	49.1		ug/L		98	70 - 130
Bromobenzene	50.0	43.7		ug/L		87	70 - 132
Bromochloromethane	50.0	53.4		ug/L		107	70 - 130
Bromodichloromethane	50.0	54.3		ug/L		109	67 - 133
Bromoform	50.0	46.5		ug/L		93	57 - 140
Bromomethane	50.0	24.6		ug/L		49	10 - 160
2-Butanone (MEK)	200	120	*	ug/L		60	61 - 145
Carbon disulfide	50.0	47.7		ug/L		95	61 - 137
Carbon tetrachloride	50.0	55.4		ug/L		111	61 - 137
Chlorobenzene	50.0	49.8		ug/L		100	70 - 130
Dibromochloromethane	50.0	58.1		ug/L		116	67 - 135
Chloroethane	50.0	38.8		ug/L		78	55 - 141
2-Chloroethyl vinyl ether	50.0	43.2		ug/L		86	10 - 160
Chloroform	50.0	50.2		ug/L		100	69 - 130
1-Chlorohexane	50.0	67.3	*	ug/L		135	69 - 130
Chloromethane	50.0	44.5		ug/L		89	58 - 137
cis-1,2-Dichloroethene	50.0	57.1		ug/L		114	68 - 130
cis-1,3-Dichloropropene	50.0	53.9		ug/L		108	69 - 132
1,2-Dichlorobenzene	50.0	52.5		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	32.4		ug/L		65	41 - 146
1,1-Dichloroethane	50.0	55.4		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	58.9		ug/L		118	69 - 130
1,1-Dichloroethene	50.0	47.2		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	58.9		ug/L		118	70 - 130
1,3-Dichloropropane	50.0	54.9		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	51.3		ug/L		103	52 - 135
1,1-Dichloropropene	50.0	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	50.8		ug/L		102	70 - 130
Ethyl methacrylate	50.0	56.1		ug/L		112	68 - 130
Hexachlorobutadiene	50.0	56.2		ug/L		112	53 - 140
2-Hexanone	200	190		ug/L		95	65 - 137
Isopropylbenzene	50.0	52.5		ug/L		105	70 - 130
Methylene bromide	50.0	49.6		ug/L		99	70 - 130
Methylene Chloride	50.0	50.4		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	245		ug/L		122	69 - 138
Methyl tert-butyl ether	50.0	47.7		ug/L		95	66 - 130
m-Xylene & p-Xylene	50.0	50.5		ug/L		101	70 - 130
Naphthalene	50.0	49.0		ug/L		98	47 - 149
n-Butylbenzene	50.0	54.1		ug/L		108	67 - 130
N-Propylbenzene	50.0	45.6		ug/L		91	70 - 130
o-Chlorotoluene	50.0	43.3		ug/L		87	70 - 130
o-Xylene	50.0	52.0		ug/L		104	70 - 130
p-Chlorotoluene	50.0	43.4		ug/L		87	70 - 130

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

Lab Sample ID: LCS 400-473519/1002
Matrix: Water
Analysis Batch: 473519

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	52.8		ug/L		106	65 - 130
sec-Butylbenzene	50.0	47.2		ug/L		94	66 - 130
Styrene	50.0	53.0		ug/L		106	70 - 130
tert-Butylbenzene	50.0	47.3		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.8		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.4		ug/L		89	70 - 131
Tetrachloroethene	50.0	52.5		ug/L		105	65 - 130
Toluene	50.0	54.3		ug/L		109	70 - 130
trans-1,2-Dichloroethene	50.0	44.9		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	57.7		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	54.6		ug/L		109	60 - 138
1,2,4-Trichlorobenzene	50.0	49.4		ug/L		99	60 - 140
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	68 - 130
1,1,2-Trichloroethane	50.0	52.9		ug/L		106	70 - 130
Trichloroethene	50.0	50.6		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	37.5		ug/L		75	65 - 138
1,2,3-Trichloropropane	50.0	43.9		ug/L		88	70 - 130
1,2,4-Trimethylbenzene	50.0	47.5		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	50.0	45.0		ug/L		90	69 - 130
Vinyl acetate	100	71.1		ug/L		71	26 - 160
Vinyl chloride	50.0	44.7		ug/L		89	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*109*		*80 - 120*

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

Lab Sample ID: MB 400-473251/1-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/08/20 10:16	01/10/20 16:31	1
Benzenethiol	ND		10	1.7	ug/L		01/08/20 10:16	01/10/20 16:31	1
Benzoic acid	ND		30	7.3	ug/L		01/08/20 10:16	01/10/20 16:31	1
Benzyl alcohol	ND		10	2.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/08/20 10:16	01/10/20 16:31	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/08/20 10:16	01/10/20 16:31	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/08/20 10:16	01/10/20 16:31	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/08/20 10:16	01/10/20 16:31	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/08/20 10:16	01/10/20 16:31	1
4-Chloroaniline	ND		10	3.4	ug/L		01/08/20 10:16	01/10/20 16:31	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/08/20 10:16	01/10/20 16:31	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/08/20 10:16	01/10/20 16:31	1
2-Chlorophenol	ND		10	2.2	ug/L		01/08/20 10:16	01/10/20 16:31	1

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

Lab Sample ID: MB 400-473251/1-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
Dibenzofuran	ND		10	0.52	ug/L		01/08/20 10:16	01/10/20 16:31	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
Diethyl phthalate	ND		10	0.70	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/08/20 10:16	01/10/20 16:31	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/08/20 10:16	01/10/20 16:31	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/08/20 10:16	01/10/20 16:31	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/08/20 10:16	01/10/20 16:31	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/08/20 10:16	01/10/20 16:31	1
1,4-Dioxane	ND		10	1.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/08/20 10:16	01/10/20 16:31	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/08/20 10:16	01/10/20 16:31	1
Hexachloroethane	ND		10	4.2	ug/L		01/08/20 10:16	01/10/20 16:31	1
Indene	ND		10	1.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
Isophorone	ND		10	0.57	ug/L		01/08/20 10:16	01/10/20 16:31	1
2-Methylphenol	ND		10	1.8	ug/L		01/08/20 10:16	01/10/20 16:31	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
2-Nitroaniline	ND		10	2.2	ug/L		01/08/20 10:16	01/10/20 16:31	1
3-Nitroaniline	ND		10	1.8	ug/L		01/08/20 10:16	01/10/20 16:31	1
4-Nitroaniline	ND		10	2.5	ug/L		01/08/20 10:16	01/10/20 16:31	1
Nitrobenzene	ND		10	0.55	ug/L		01/08/20 10:16	01/10/20 16:31	1
2-Nitrophenol	ND		10	0.65	ug/L		01/08/20 10:16	01/10/20 16:31	1
4-Nitrophenol	ND		10	2.1	ug/L		01/08/20 10:16	01/10/20 16:31	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/08/20 10:16	01/10/20 16:31	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/08/20 10:16	01/10/20 16:31	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/08/20 10:16	01/10/20 16:31	1
Pentachlorophenol	ND		20	1.8	ug/L		01/08/20 10:16	01/10/20 16:31	1
Phenol	ND		10	2.6	ug/L		01/08/20 10:16	01/10/20 16:31	1
Pyridine	ND		10	3.2	ug/L		01/08/20 10:16	01/10/20 16:31	1
Quinoline	ND		10	6.0	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/08/20 10:16	01/10/20 16:31	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/08/20 10:16	01/10/20 16:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*01/08/20 10:16*	*01/10/20 16:31*	*1*
2-Fluorophenol	*19*		*10 - 120*	*01/08/20 10:16*	*01/10/20 16:31*	*1*
Nitrobenzene-d5	*87*		*27 - 120*	*01/08/20 10:16*	*01/10/20 16:31*	*1*
Phenol-d5	*58*		*10 - 120*	*01/08/20 10:16*	*01/10/20 16:31*	*1*
Terphenyl-d14	*109*		*53 - 125*	*01/08/20 10:16*	*01/10/20 16:31*	*1*
2,4,6-Tribromophenol	*22*		*15 - 135*	*01/08/20 10:16*	*01/10/20 16:31*	*1*

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

Lab Sample ID: LCS 400-473251/2-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	22.2		ug/L		74	29 - 120
Benzoic acid	117	ND	*	ug/L		3	10 - 150
Benzyl alcohol	30.0	22.8		ug/L		76	19 - 125
Bis(2-chloroethoxy)methane	30.0	22.1		ug/L		74	45 - 120
Bis(2-chloroethyl)ether	30.0	25.1		ug/L		84	48 - 120
bis (2-chloroisopropyl) ether	30.0	26.7		ug/L		89	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	28.4		ug/L		95	48 - 150
4-Bromophenyl phenyl ether	30.0	25.4		ug/L		85	55 - 122
Butyl benzyl phthalate	30.0	27.5		ug/L		92	46 - 145
4-Chloroaniline	30.0	26.6		ug/L		89	30 - 120
4-Chloro-3-methylphenol	30.0	20.6		ug/L		69	39 - 140
2-Chloronaphthalene	30.0	23.2		ug/L		77	52 - 120
2-Chlorophenol	30.0	21.7		ug/L		72	34 - 120
4-Chlorophenyl phenyl ether	30.0	22.7		ug/L		76	58 - 124
Dibenz[a,h]acridine	30.0	23.1		ug/L		77	46 - 149
Dibenzofuran	30.0	23.6		ug/L		79	58 - 123
2,4-Dichlorophenol	30.0	19.3		ug/L		64	39 - 128
Diethyl phthalate	30.0	27.6		ug/L		92	44 - 146
2,4-Dimethylphenol	30.0	24.1		ug/L		80	44 - 120
Dimethyl phthalate	30.0	25.5		ug/L		85	50 - 131
Di-n-butyl phthalate	30.0	28.5		ug/L		95	55 - 131
4,6-Dinitro-ortho-cresol	60.0	8.59	J	ug/L		14	10 - 150
2,4-Dinitrophenol	60.0	ND	*	ug/L		5	10 - 150
2,4-Dinitrotoluene	30.0	24.2		ug/L		81	58 - 140
2,6-Dinitrotoluene	30.0	25.4		ug/L		85	57 - 130
Di-n-octyl phthalate	30.0	28.3		ug/L		94	50 - 150
1,4-Dioxane	30.0	16.6		ug/L		55	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	30.0		ug/L		100	47 - 123
Hexachlorobenzene	30.0	25.4		ug/L		85	52 - 131
Hexachlorocyclopentadiene	30.0	3.91	J	ug/L		13	10 - 129
Hexachloroethane	30.0	18.6		ug/L		62	20 - 120
Indene	30.0	20.2		ug/L		67	47 - 120
Isophorone	30.0	23.3		ug/L		78	49 - 120
2-Methylphenol	30.0	25.5		ug/L		85	39 - 123
3 & 4 Methylphenol	30.0	23.8		ug/L		79	38 - 121
2-Nitroaniline	30.0	29.4		ug/L		98	47 - 150
3-Nitroaniline	30.0	32.3		ug/L		108	34 - 132
4-Nitroaniline	30.0	34.0		ug/L		113	41 - 135
Nitrobenzene	30.0	23.5		ug/L		78	47 - 120
2-Nitrophenol	30.0	15.0		ug/L		50	28 - 136
4-Nitrophenol	60.0	4.77	J *	ug/L		8	10 - 150
N-Nitrosodimethylamine	30.0	29.1		ug/L		97	22 - 148
N-Nitrosodi-n-propylamine	30.0	27.4		ug/L		91	44 - 120
N-Nitrosodiphenylamine	29.8	27.0		ug/L		91	56 - 120
Pentachlorophenol	60.0	17.3	J	ug/L		29	15 - 141
Phenol	30.0	23.2		ug/L		77	33 - 120
Pyridine	60.0	37.1		ug/L		62	26 - 120
Quinoline	30.0	23.5		ug/L		78	51 - 129

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

Lab Sample ID: LCS 400-473251/2-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	30.0	20.7		ug/L		69	38 - 147
2,4,6-Trichlorophenol	30.0	17.7		ug/L		59	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*34 - 120*
2-Fluorophenol	*61*		*10 - 120*
Nitrobenzene-d5	*89*		*27 - 120*
Phenol-d5	*71*		*10 - 120*
Terphenyl-d14	*93*		*53 - 125*
2,4,6-Tribromophenol	*63*		*15 - 135*

Lab Sample ID: LCS 400-473251/4-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473251

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	*87*		*34 - 120*
2-Fluorophenol	*45*		*10 - 120*
Nitrobenzene-d5	*101*		*27 - 120*
Phenol-d5	*76*		*10 - 120*
Terphenyl-d14	*112*		*53 - 125*
2,4,6-Tribromophenol	*28*		*15 - 135*

Lab Sample ID: LCSD 400-473251/3-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	23.8		ug/L		79	29 - 120	7	30
Benzoic acid	117	ND	*	ug/L		3	10 - 150	11	30
Benzyl alcohol	30.0	26.1		ug/L		87	19 - 125	14	30
Bis(2-chloroethoxy)methane	30.0	23.5		ug/L		78	45 - 120	6	30
Bis(2-chloroethyl)ether	30.0	25.5		ug/L		85	48 - 120	2	30
bis (2-chloroisopropyl) ether	30.0	27.3		ug/L		91	30 - 125	2	30
Bis(2-ethylhexyl) phthalate	30.0	30.4		ug/L		101	48 - 150	7	30
4-Bromophenyl phenyl ether	30.0	26.4		ug/L		88	55 - 122	4	30
Butyl benzyl phthalate	30.0	28.0		ug/L		93	46 - 145	2	30
4-Chloroaniline	30.0	25.4		ug/L		85	30 - 120	5	30
4-Chloro-3-methylphenol	30.0	25.6		ug/L		85	39 - 140	22	30
2-Chloronaphthalene	30.0	24.6		ug/L		82	52 - 120	6	30
2-Chlorophenol	30.0	23.0		ug/L		77	34 - 120	6	30
4-Chlorophenyl phenyl ether	30.0	24.1		ug/L		80	58 - 124	6	30
Dibenz[a,h]acridine	30.0	24.1		ug/L		80	46 - 149	4	30
Dibenzofuran	30.0	24.7		ug/L		82	58 - 123	5	30
3,3'-Dichlorobenzidine	40.0	62.0	*	ug/L		155	39 - 135	5	30

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

Lab Sample ID: LCSD 400-473251/3-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dichlorophenol	30.0	23.9		ug/L		80	39 - 128	21	30
Diethyl phthalate	30.0	28.7		ug/L		96	44 - 146	4	30
2,4-Dimethylphenol	30.0	26.1		ug/L		87	44 - 120	8	30
Dimethyl phthalate	30.0	26.5		ug/L		88	50 - 131	4	30
Di-n-butyl phthalate	30.0	29.9		ug/L		100	55 - 131	5	30
4,6-Dinitro-ortho-cresol	60.0	62.5	*	ug/L		104	10 - 150	152	30
2,4-Dinitrophenol	60.0	44.8	*	ug/L		75	10 - 150	175	30
2,4-Dinitrotoluene	30.0	26.3		ug/L		88	58 - 140	8	30
2,6-Dinitrotoluene	30.0	26.8		ug/L		89	57 - 130	5	30
Di-n-octyl phthalate	30.0	28.9		ug/L		96	50 - 150	2	30
1,4-Dioxane	30.0	17.7		ug/L		59	25 - 120	6	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	31.7		ug/L		106	47 - 123	6	30
Hexachlorobenzene	30.0	26.8		ug/L		89	52 - 131	5	30
Hexachlorocyclopentadiene	30.0	10.0	J *	ug/L		33	10 - 129	88	30
Hexachloroethane	30.0	21.0		ug/L		70	20 - 120	12	30
Indene	30.0	21.9		ug/L		73	47 - 120	8	30
Isophorone	30.0	24.6		ug/L		82	49 - 120	5	30
2-Methylphenol	30.0	28.3		ug/L		94	39 - 123	10	30
3 & 4 Methylphenol	30.0	26.8		ug/L		89	38 - 121	12	30
2-Nitroaniline	30.0	30.6		ug/L		102	47 - 150	4	30
3-Nitroaniline	30.0	33.2		ug/L		111	34 - 132	3	30
4-Nitroaniline	30.0	35.7		ug/L		119	41 - 135	5	30
Nitrobenzene	30.0	24.5		ug/L		82	47 - 120	4	30
2-Nitrophenol	30.0	25.2	*	ug/L		84	28 - 136	50	30
4-Nitrophenol	60.0	59.1	*	ug/L		98	10 - 150	170	30
N-Nitrosodimethylamine	30.0	30.4		ug/L		101	22 - 148	4	30
N-Nitrosodi-n-propylamine	30.0	28.1		ug/L		94	44 - 120	3	30
N-Nitrosodiphenylamine	29.8	28.5		ug/L		96	56 - 120	5	30
Pentachlorophenol	60.0	50.1	*	ug/L		83	15 - 141	97	30
Phenol	30.0	26.1		ug/L		87	33 - 120	12	30
Pyridine	60.0	39.5		ug/L		66	26 - 120	6	30
Quinoline	30.0	24.9		ug/L		83	51 - 129	6	30
2,4,5-Trichlorophenol	30.0	28.0		ug/L		93	38 - 147	30	30
2,4,6-Trichlorophenol	30.0	24.9	*	ug/L		83	36 - 139	34	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*93*		*27 - 120*
Phenol-d5	*80*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*84*		*15 - 135*

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

Lab Sample ID: LCSD 400-473251/5-A
Matrix: Water
Analysis Batch: 473656

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	3.79	J *	ug/L		13	10 - 120	124	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*34 - 120*
2-Fluorophenol	*57*		*10 - 120*
Nitrobenzene-d5	*96*		*27 - 120*
Phenol-d5	*85*		*10 - 120*
Terphenyl-d14	*110*		*53 - 125*
2,4,6-Tribromophenol	*74*		*15 - 135*

Lab Sample ID: MB 400-476781/1-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		20	1.8	ug/L		02/05/20 15:05	02/06/20 17:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*34 - 120*	*02/05/20 15:05*	*02/06/20 17:04*	*1*
2-Fluorophenol	*52*		*10 - 120*	*02/05/20 15:05*	*02/06/20 17:04*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*02/05/20 15:05*	*02/06/20 17:04*	*1*
Phenol-d5	*57*		*10 - 120*	*02/05/20 15:05*	*02/06/20 17:04*	*1*
Terphenyl-d14	*69*		*53 - 125*	*02/05/20 15:05*	*02/06/20 17:04*	*1*
2,4,6-Tribromophenol	*45*		*15 - 135*	*02/05/20 15:05*	*02/06/20 17:04*	*1*

Lab Sample ID: LCS 400-476781/2-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	60.0	35.4		ug/L		59	15 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*34 - 120*
2-Fluorophenol	*65*		*10 - 120*
Nitrobenzene-d5	*93*		*27 - 120*
Phenol-d5	*72*		*10 - 120*
Terphenyl-d14	*72*		*53 - 125*
2,4,6-Tribromophenol	*61*		*15 - 135*

Lab Sample ID: LCSD 400-476781/3-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476781

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	60.0	31.2		ug/L		52	15 - 141	13	30

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

Lab Sample ID: LCSD 400-476781/3-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476781

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*89*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*69*		*53 - 125*
2,4,6-Tribromophenol	*54*		*15 - 135*

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

Lab Sample ID: LCS 400-473251/2-A
Matrix: Water
Analysis Batch: 474338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine - RA	40.0	30.2		ug/L		76	39 - 135

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

Lab Sample ID: MB 400-473251/1-A
Matrix: Water
Analysis Batch: 473559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
Anthracene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Chrysene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Fluoranthene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
Fluorene	ND		0.20	0.021	ug/L		01/08/20 10:16	01/10/20 16:33	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		01/08/20 10:16	01/10/20 16:33	1
Phenanthrene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
Pyrene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/08/20 10:16	01/10/20 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*102*		*33 - 138*	*01/08/20 10:16*	*01/10/20 16:33*	*1*
2-Fluorobiphenyl	*110*		*15 - 122*	*01/08/20 10:16*	*01/10/20 16:33*	*1*
Nitrobenzene-d5	*115*		*19 - 130*	*01/08/20 10:16*	*01/10/20 16:33*	*1*

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

Lab Sample ID: LCS 400-473251/2-A
Matrix: Water
Analysis Batch: 473559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.6		ug/L		82	41 - 120
Acenaphthylene	30.0	23.5		ug/L		78	44 - 120
Anthracene	30.0	22.7		ug/L		76	49 - 120
Benzo[a]anthracene	30.0	19.9		ug/L		66	61 - 135
Benzo[a]pyrene	30.0	21.9		ug/L		73	52 - 120
Benzo[b]fluoranthene	30.0	21.2		ug/L		71	53 - 134
Benzo[g,h,i]perylene	30.0	29.5		ug/L		98	47 - 133
Benzo[k]fluoranthene	30.0	20.6		ug/L		69	57 - 134
Chrysene	30.0	19.9		ug/L		66	55 - 122
Dibenz(a,h)anthracene	30.0	32.9		ug/L		110	48 - 146
Fluoranthene	30.0	25.0		ug/L		83	54 - 128
Fluorene	30.0	24.6		ug/L		82	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	32.4		ug/L		108	43 - 142
Phenanthrene	30.0	23.1		ug/L		77	48 - 120
Pyrene	30.0	18.9		ug/L		63	48 - 132
1-Methylnaphthalene	30.0	19.6		ug/L		65	41 - 120
2-Methylnaphthalene	30.0	19.0		ug/L		63	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*79*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*100*		*19 - 130*

Lab Sample ID: LCSD 400-473251/3-A
Matrix: Water
Analysis Batch: 473559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.6		ug/L		92	41 - 120	11	56
Acenaphthylene	30.0	26.3		ug/L		88	44 - 120	11	56
Anthracene	30.0	25.1		ug/L		84	49 - 120	10	51
Benzo[a]anthracene	30.0	20.2		ug/L		67	61 - 135	1	49
Benzo[a]pyrene	30.0	24.7		ug/L		82	52 - 120	12	50
Benzo[b]fluoranthene	30.0	23.7		ug/L		79	53 - 134	11	54
Benzo[g,h,i]perylene	30.0	32.8		ug/L		109	47 - 133	10	50
Benzo[k]fluoranthene	30.0	22.5		ug/L		75	57 - 134	9	52
Chrysene	30.0	20.2		ug/L		67	55 - 122	1	50
Dibenz(a,h)anthracene	30.0	34.7		ug/L		116	48 - 146	5	50
Fluoranthene	30.0	28.3		ug/L		94	54 - 128	13	52
Fluorene	30.0	28.0		ug/L		93	45 - 125	13	56
Indeno[1,2,3-cd]pyrene	30.0	34.1		ug/L		114	43 - 142	5	51
Phenanthrene	30.0	25.3		ug/L		84	48 - 120	9	56
Pyrene	30.0	19.8		ug/L		66	48 - 132	5	52
1-Methylnaphthalene	30.0	23.6		ug/L		79	41 - 120	19	55
2-Methylnaphthalene	30.0	22.8		ug/L		76	32 - 124	18	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*85*		*33 - 138*

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

Lab Sample ID: LCSD 400-473251/3-A
Matrix: Water
Analysis Batch: 473559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473251

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*96*		*15 - 122*
Nitrobenzene-d5	*103*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-473412/1-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473412

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		01/09/20 09:56	01/10/20 13:45	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/09/20 09:56	01/10/20 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/09/20 09:56*	*01/10/20 13:45*	*1*

Lab Sample ID: LCS 400-473412/2-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.161	*	ug/L		161	60 - 140
1,2-Dibromoethane	0.100	0.139		ug/L		139	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*51 - 149*

Lab Sample ID: LCSD 400-473412/3-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473412

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.121		ug/L		121	60 - 140	28	30
1,2-Dibromoethane	0.100	0.0959	*	ug/L		96	60 - 140	37	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*70*		*51 - 149*

Lab Sample ID: MB 400-473543/1-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473543

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		01/10/20 09:24	01/17/20 07:43	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/10/20 09:24	01/17/20 07:43	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-473543/1-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473543

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	111		51 - 149	01/10/20 09:24	01/17/20 07:43	1

Lab Sample ID: LCS 400-473543/2-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.205	*	ug/L		205	60 - 140
1,2-Dibromoethane	0.100	0.0958		ug/L		96	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	126		51 - 149

Lab Sample ID: LCSD 400-473543/3-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473543

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.204	*	ug/L		204	60 - 140	1	30
1,2-Dibromoethane	0.100	0.111		ug/L		111	60 - 140	14	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	124		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ 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 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES DATE: 1/6/20

PAGE: 1 of 2

COMPANY: AECOM

COST CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60619901 - 1.03.001 / 60619901 - 1.03.0011

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

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AECOM Dlvr ID:

PROJECT CONTACT (Hardcopy of PSR Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): James Ragodz, Ben Burleson

LAB USE ONLY

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TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ON WEEKEND ☐ RESULTS NEEDED

☐ 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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.001 | UNIT COST 60619901 - 1.03.0011

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-010620-8260-A	1/6/20	0000	Water	2					2	2			
	TB-ROX-010620-8011-A	1/6/20	0000	H_2O	2					2			2	
	MW4-ROX-01062D-EB	1/6/20	0820	H_2O	4			2		6	2	1	2	1
	MW4-ROX-010620	1/6/20	0915	H_2O	4			2		6	2	1	2	1
	MW25-ROX-010620	1/6/20	1005	H_2O	4			2		6	2	1	2	1
	MW8-ROX-010620	1/6/20	1110	H_2O	4			2		6	2	1	2	1
	MW7-ROX-010620	1/6/20	1245	H_2O	4			2		6	2	1	2	1
	MW7-ROX-010620-DUP	1/6/20	1245	H_2O	4			2		6	2	1	2	1

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

100-182185 COC

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	Fedex: 1275 8885 6554 1275 8885 6543 1275 8885 6532 1275 8885 6521	1/6/2020	1600
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date: 1.7.20	Time: 8:46

Version: 14Dec15

Custody Seal #s: 1197521 / 1197520 1197525 / 1197524 1197523 / 1197522 1197527 / 1197526

0.0°, 1.7°, 0.0°, 0.0°, IR8

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2/19/2020 (Rev. 2)

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 # 1364580 (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 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/6/2020
PAGE: 2 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 - 1.03.001 / 60619901 - 1.03.0011
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
LOT 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 Office ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Sub Contractor E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com
SAMPLER NAME(S) (Print): Mary DiAngelo B. Howell
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
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* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.001: VOC 8260; SVOC 8270
UNIT COST 60619901 - 1.03.0011: 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-010620-8260-B	1/6/2020	0900	Water	X					2	X			
	TB-ROX-010620-8011-B		0900		X					2			X	
	P114R-ROX-010620-EB		0830		X			X		6	X	X	X	X
	P114R-ROX-010620		1020		X			X		6	X	X	X	X
	MW13-ROX-010620		1110		X			X		6	X	X	X	X
	MW22-ROX-010620		1235		X			X		6	X	X	X	X
	MW5-ROX-010620		1320		X			X		6	X	X	X	X
	MDiAngelo 1/6/20													

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MDiAngelo	Fedex: SAME as page 1	1/6/2020	1600
	Received by: (Signature)	Date: 1.7.20	Time: 8:46

Version: 14Dec19

Custody seal #s : SAME as page 1
0.0°C, 1.7°C, 0.0°C, 0.0°C IR8

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Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182185-1

Login Number: 182185
List Number: 1
Creator: Brown, Nathan

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, 0.0°C, 0.0°C, 1.7°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-182185-1

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	02-22-20
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	200041	10-09-19 *
Illinois	NELAP	004586	10-09-19 *
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	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182255-1-Rev. 2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 2/28/2020

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

Sample Identification	Sample Identification
TB-ROX-010720-8260-A	TB-ROX-010720-8011-A
P54-ROX-010720-EB	P54-ROX-010720
MW24-ROX-010720	MW11-ROX-010720
MW27-ROX-010720	MW12-ROX-010720
TB-ROX-010720-8260-B	TB-ROX-010720-8011-B
MW14-ROX-010720-EB	MW14-ROX-010720
P66-ROX-010720	ROST4PZC-ROX-010720
ROST4PZE-ROX-010720	

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, laboratory case narrative indicated bis(2-ethylhexyl) phthalate was re-extracted outside of the extraction holding time criteria in sample MW24-ROX-010720. bis(2-Ethylhexyl) phthalate was detected in equipment blank P54-ROX-010720-EB, and indene was detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in samples MW12-ROX-010720 and ROST4PZE-ROX-010720. Several VOC MS/MSD recoveries were outside evaluation criteria in sample P54-ROX-010720. The SVOC internal standard recovery for chrysene-d_{12} was outside criteria in the continuing calibration verification. Several samples were diluted to bring certain PAHs, and VOCs in sample ROST4PZE-ROX-010720, into calibration range of the instrument; SVOCs in sample P66-ROX-010720 were diluted due to the nature of the sample matrix. The continuing calibration verifications for several analytes were outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised to include re-analysis of pentachlorophenol in several samples, and re-extraction and re-analysis of bis(2-ethylhexyl) phthalate in sample MW24-ROX-010720.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, bis(2-ethylhexyl) phthalate was re-extracted 20 days outside of the extraction holding time criteria (7 days) in sample MW24-ROX-010720 due to results that were not consistent with the historical, and due to known laboratory contamination. Professional judgement was used to qualify as estimated (**UJ**); however, not reject the out of holding time data. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW24-ROX-010720-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
P54-ROX-010720-EB	SVOCs	bis(2-Ethylhexyl) phthalate	9.0 µg/L
MB 400-473324/1-A	SVOCs	Indene	7.99 µg/L

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

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
ROST4PZE-ROX-010720	SVOCs	Indene	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-473519/1002	VOCs	2-Butanone (MEK)	**60**	NA	61-145
LCS 400-473519/1002	VOCs	1-Chlorohexane	**135**	NA	69-130
LCS/LCSD 400-473324/30-A/31-A	SVOCs	Benzenethiol	**2/3**	26	10-120/30
LCS/LCSD 400-473412/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**161**/121	28	60-140/30
LCS/LCSD 400-473412/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	139/96	**37**	60-140/30
LCS/LCSD 400-473543/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**205/204**	1	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
P54-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
P54-ROX-010720	SVOCs	Benzenethiol	**UJ**
MW24-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
MW24-ROX-010720	SVOCs	Benzenethiol	**UJ**
MW11-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
MW11-ROX-010720	SVOCs	Benzenethiol	**UJ**
MW27-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
MW27-ROX-010720	SVOCs	Benzenethiol	**UJ**
MW12-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
MW12-ROX-010720	SVOCs	Benzenethiol	**UJ**
MW14-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
MW14-ROX-010720	SVOCs	Benzenethiol	**UJ**
P66-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
P66-ROX-010720	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-010720	VOCs	2-Butanone (MEK)	**UJ**
ROST4PZC-ROX-010720	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-010720	VOCs	2-Butanone (MEK)	**J**
ROST4PZE-ROX-010720	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW12-ROX-010720	SVOCs	2,4,6-Tribromophenol	**13**	15-135
ROST4PZE-ROX-010720	SVOCs	2-Fluorophenol	**0.2**	10-120
ROST4PZE-ROX-010720	SVOCs	Phenol-d_5	**0.8**	10-120

Analytical data that required qualification based on surrogate data are included in the table below. Qualifications due to surrogate recoveries were not required if only one of three acid SVOC surrogate recoveries were outside evaluation criteria in the associated samples.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-010720	SVOCs	Benzoic acid	**UJ**
ROST4PZE-ROX-010720	SVOCs	Benzyl alcohol	**UJ**
ROST4PZE-ROX-010720	SVOCs	4-Chloro-3-methylphenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2-Chlorophenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-010720	SVOCs	2,4-Dichlorophenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2,4-Dimethylphenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2,4-Dinitrophenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2-Methylphenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	3&4-Methylphenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2-Nitrophenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	4-Nitrophenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	Pentachlorophenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	Phenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2,4,5-Trichlorophenol	**UJ**
ROST4PZE-ROX-010720	SVOCs	2,4,6-Trichlorophenol	**UJ**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample P54-ROX-010720 was spiked and duplicated for Method 8260 VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P54-ROX-010720	VOCs	2-Butanone (MEK)	55/**52**	6	55-150/30
P54-ROX-010720	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50

Analytical data that required qualification based on MS/MSD data are included in the table below. 2-Butanone (MEK) in sample P54-ROX-010720 was previously qualified in Section 5.0 of this review due to LCS/LCSD recoveries outside evaluation criteria.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-010720	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
ICV 400-472769/11	SVOCs	Chrysene-d_{12}	**381274**	417202-1668806

Initial calibration verifications are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted, with the exception of SVOCs in sample P66-ROX-010720, due to the nature of the sample matrix. SVOCs were non-detect at a dilution factor of 5X, with a raised reporting limits of between 49 and 150 µg/L. Due to historical SVOC detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, SVOCs in sample P66-ROX-010720 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P66-ROX-010720	SVOCs	All non-detects	**UJ**

Additionally, the continuing calibration verifications for several analytes were outside acceptance criteria, biased low, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-010720	VOCs	Bromomethane	**UJ**
P54-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
P54-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
P54-ROX-010720	SVOCs	Quinoline	**UJ**
MW24-ROX-010720	VOCs	Bromomethane	**UJ**
MW24-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
MW24-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW24-ROX-010720	SVOCs	Quinoline	**UJ**
MW11-ROX-010720	VOCs	Bromomethane	**UJ**
MW11-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
MW11-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW11-ROX-010720	SVOCs	Quinoline	**UJ**
MW27-ROX-010720	VOCs	Bromomethane	**UJ**
MW27-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
MW27-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW27-ROX-010720	SVOCs	Quinoline	**UJ**
MW12-ROX-010720	VOCs	Bromomethane	**UJ**
MW12-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
MW12-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW12-ROX-010720	SVOCs	Quinoline	**UJ**
MW14-ROX-010720	VOCs	Bromomethane	**UJ**
MW14-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW14-ROX-010720	SVOCs	Quinoline	**UJ**
P66-ROX-010720	VOCs	Bromomethane	**UJ**
ROST4PZC-ROX-010720	VOCs	Bromomethane	**UJ**
ROST4PZC-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
ROST4PZC-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZC-ROX-010720	SVOCs	Quinoline	**UJ**
ROST4PZE-ROX-010720	VOCs	Bromomethane	**UJ**
ROST4PZE-ROX-010720	SVOCs	Dibenz[a,h]acridine	**UJ**
ROST4PZE-ROX-010720	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZE-ROX-010720	SVOCs	Quinoline	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-182255-1
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:
2/19/2020 9:14:41 AM
Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

Designee for

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

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Reviewed 2/28/20 MK

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

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Job ID: 400-182255-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-182255-1

Comments
021920 Revised Report to include pentachlorophenol results originally reported for samples -4, -5, and -12; both original and re-analysis results are reported. This report replaces the report previously issued on 020720.

020720 Revised Report to correct pentachlorophenol results on samples -4, -5, and -12 after re-analysis and to provide bis (2-ethylhexyl) phthalate secondary results for sample -5 after re-extraction and re-analysis out of hold time. This report replaces the report previously issued on 012720.

Receipt
The samples were received on 1/8/2020 8:56 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.3° C, 0.6° C, 1.6° C and 2.2° C.

GC/MS VOA
Method 8260B: The following analyte recovered outside control limits for the LCS associated with analytical batch 400-473519: 2-Butanone (MEK). This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-473519 recovered outside control limits for the following analyte: 1-Chlorohexane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-473519 recovered outside acceptance criteria, low biased, for Bromomethane. 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 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-473519 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-473519 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-473519 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-010720-8260-A (400-182255-1), P54-ROX-010720-EB (400-182255-3), P54-ROX-010720 (400-182255-4), MW24-ROX-010720 (400-182255-5), MW11-ROX-010720 (400-182255-6), MW27-ROX-010720 (400-182255-7), MW12-ROX-010720 (400-182255-8), TB-ROX-010720-8260-B (400-182255-9), MW14-ROX-010720-EB (400-182255-11), MW14-ROX-010720 (400-182255-12), P66-ROX-010720 (400-182255-13), ROST4PZC-ROX-010720 (400-182255-14) and ROST4PZE-ROX-010720 (400-182255-15). 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 sample was diluted to bring the concentration of target analytes within the calibration range: ROST4PZE-ROX-010720 (400-182255-15). 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 initial calibration verification (ICV) analyzed in batch 400-469009 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Job ID: 400-182255-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-473324 and analytical batch 400-473903 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 400-473903 recovered above the upper control limit for N-Nitrosodimethylamine and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: P66-ROX-010720 (400-182255-13). Elevated reporting limits (RLs) are provided.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW12-ROX-010720 (400-182255-8). These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following sample was outside control limits: ROST4PZE-ROX-010720 (400-182255-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The continuing calibration verifications (CCVs) associated with batch 400-473903 recovered outside acceptance criteria, low biased, for Dibenz[a,h]acridine, Quinoline and 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 re-prepared outside holding time for confirmation of bis (2-ethylhexyl) phthalate in the original extract: MW24-ROX-010720 (400-182255-5).

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-473920 recovered above the upper control limit for 1-Methylnaphthalene, Dibenz(a,h)anthracene, Fluorene and Indeno[1,2,3-cd]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: (CCVIS 400-474274/2). 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 400-473595 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-473412 and analytical batch 400-473595 recovered outside control limits for the following analytes: Ethylene Dibromide.

Method 8011: The laboratory control sample (LCS) for preparation batch 400-473412 and analytical batch 400-473595 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 laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-473543 and analytical batch 400-474311 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 400-474311 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: 400-182255-1 (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: 400-182255-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182255-1	TB-ROX-010720-8260-A	Water	01/07/20 00:00	01/08/20 08:56	
400-182255-2	TB-ROX-010720-8011-A	Water	01/07/20 00:00	01/08/20 08:56	
400-182255-3	P54-ROX-010720-EB	Water	01/07/20 08:15	01/08/20 08:56	
400-182255-4	P54-ROX-010720	Water	01/07/20 09:20	01/08/20 08:56	
400-182255-5	MW24-ROX-010720	Water	01/07/20 10:10	01/08/20 08:56	
400-182255-6	MW11-ROX-010720	Water	01/07/20 10:55	01/08/20 08:56	
400-182255-7	MW27-ROX-010720	Water	01/07/20 11:55	01/08/20 08:56	
400-182255-8	MW12-ROX-010720	Water	01/07/20 13:40	01/08/20 08:56	
400-182255-9	TB-ROX-010720-8260-B	Water	01/07/20 00:00	01/08/20 08:56	
400-182255-10	TB-ROX-010720-8011-B	Water	01/07/20 00:00	01/08/20 08:56	
400-182255-11	MW14-ROX-010720-EB	Water	01/07/20 08:40	01/08/20 08:56	
400-182255-12	MW14-ROX-010720	Water	01/07/20 10:50	01/08/20 08:56	
400-182255-13	P66-ROX-010720	Water	01/07/20 11:25	01/08/20 08:56	
400-182255-14	ROST4PZC-ROX-010720	Water	01/07/20 13:35	01/08/20 08:56	
400-182255-15	ROST4PZE-ROX-010720	Water	01/07/20 14:15	01/08/20 08:56	

Detection Summary

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

Job ID: 400-182255-1

Client Sample ID: TB-ROX-010720-8260-A — Lab Sample ID: 400-182255-1

No Detections.

Client Sample ID: TB-ROX-010720-8011-A — Lab Sample ID: 400-182255-2

No Detections.

Client Sample ID: P54-ROX-010720-EB — Lab Sample ID: 400-182255-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	9.0	J	9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: P54-ROX-010720 — Lab Sample ID: 400-182255-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2.2	J	19	1.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW24-ROX-010720 — Lab Sample ID: 400-182255-5

*Do not use this data. Use re-extraction (RE) data

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
* ~~Bis(2-ethylhexyl) phthalate~~	~~67~~		~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Pentachlorophenol	2.5	J	19	1.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW11-ROX-010720 — Lab Sample ID: 400-182255-6

No Detections.

Client Sample ID: MW27-ROX-010720 — Lab Sample ID: 400-182255-7

No Detections.

Client Sample ID: MW12-ROX-010720 — Lab Sample ID: 400-182255-8

No Detections.

Client Sample ID: TB-ROX-010720-8260-B — Lab Sample ID: 400-182255-9

No Detections.

Client Sample ID: TB-ROX-010720-8011-B — Lab Sample ID: 400-182255-10

No Detections.

Client Sample ID: MW14-ROX-010720-EB — Lab Sample ID: 400-182255-11

No Detections.

Client Sample ID: MW14-ROX-010720 — Lab Sample ID: 400-182255-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2.4	J	19	1.8	ug/L	1		8270D	Total/NA

Client Sample ID: P66-ROX-010720 — Lab Sample ID: 400-182255-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59	J	1.0	0.38	ug/L	1		8260B	Total/NA
Isopropylbenzene	28		1.0	0.53	ug/L	1		8260B	Total/NA
Naphthalene	47		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	34		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	0.65	J	5.0	0.60	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P66-ROX-010720 (Continued)

Lab Sample ID: 400-182255-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
sec-Butylbenzene	2.9		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	2.1		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.64	J	1.0	0.41	ug/L	1		8260B	Total/NA
1-Methylnaphthalene - DL	66		1.9	0.19	ug/L	10		8270D LL	Total/NA
2-Methylnaphthalene - DL	42		1.9	0.19	ug/L	10		8270D LL	Total/NA

Client Sample ID: ROST4PZC-ROX-010720

Lab Sample ID: 400-182255-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	17		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.1		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	23		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	22		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	3.1		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	0.93	J	5.0	0.60	ug/L	1		8260B	Total/NA
Toluene	2.3		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	7.7		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.73	J	1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	24		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	1.4		0.20	0.020	ug/L	1		8270D LL	Total/NA
Anthracene	0.38		0.20	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	3.0		0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	13		0.20	0.020	ug/L	1		8270D LL	Total/NA
Fluorene - DL	0.98		0.98	0.10	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene - DL	24		0.98	0.098	ug/L	5		8270D LL	Total/NA
Dibenzofuran	0.82	J	9.8	0.51	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZE-ROX-010720

Lab Sample ID: 400-182255-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	47	J	50	20	ug/L	2		8260B	Total/NA
Benzene	37		2.0	0.76	ug/L	2		8260B	Total/NA
2-Butanone (MEK)	34	J* J	50	5.2	ug/L	2		8260B	Total/NA
Ethylbenzene	190		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene	5.4		2.0	1.1	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene	290		10	3.2	ug/L	2		8260B	Total/NA
Naphthalene	120		2.0	2.0	ug/L	2		8260B	Total/NA
N-Propylbenzene	6.4		2.0	1.4	ug/L	2		8260B	Total/NA
o-Chlorotoluene	8.6		2.0	1.1	ug/L	2		8260B	Total/NA
o-Xylene	33		10	1.2	ug/L	2		8260B	Total/NA
Toluene	22		2.0	0.82	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene	140		2.0	1.6	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	24		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total	320		20	3.2	ug/L	2		8260B	Total/NA
Acenaphthene	3.7		0.20	0.020	ug/L	1		8270D LL	Total/NA
Benzo[a]anthracene	0.20		0.20	0.039	ug/L	1		8270D LL	Total/NA
Chrysene	0.29		0.20	0.039	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.35		0.20	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	11		0.20	0.020	ug/L	1		8270D LL	Total/NA
Pyrene	1.3		0.20	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene - DL	74		2.0	0.20	ug/L	10		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-182255-1

Client Sample ID: ROST4PZE-ROX-010720 (Continued)

Lab Sample ID: 400-182255-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene - DL	70		2.0	0.20	ug/L	10		8270D LL	Total/NA
Fluorene - RA	4.1		0.20	0.021	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	8.1	J	9.8	4.9	ug/L	1		8270D	Total/NA
Dibenzofuran	2.1	J	9.8	0.51	ug/L	1		8270D	Total/NA
Indene	~~4.0~~	J B U	9.8	0.98	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-010720-8260-A
Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 13:00	1
Acrolein	ND		20	10	ug/L			01/10/20 13:00	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 13:00	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 13:00	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 13:00	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 13:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 13:00	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 13:00	1
2-Butanone (MEK)	ND	*	25	2.6	ug/L			01/10/20 13:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 13:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 13:00	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 13:00	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 13:00	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 13:00	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 13:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 13:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 13:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 13:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 13:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 13:00	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 13:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 13:00	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 13:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 13:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 13:00	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 13:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 13:00	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 13:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 13:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 13:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 13:00	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 13:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 13:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 13:00	1

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

Job ID: 400-182255-1

Client Sample ID: TB-ROX-010720-8260-A
Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 13:00	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 13:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 13:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 13:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 13:00	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 13:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 13:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 13:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 13:00	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:00	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 13:00	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 13:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 13:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 13:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 13:00	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 13:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 13:00	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*78 - 118*		*01/10/20 13:00*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/10/20 13:00*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*01/10/20 13:00*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: TB-ROX-010720-8011-A

Lab Sample ID: 400-182255-2

Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

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	0.0056	ug/L		01/09/20 09:57	01/10/20 15:29	1
1,2-Dibromoethane	ND	*	0.020	0.0051	ug/L		01/09/20 09:57	01/10/20 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*01/09/20 09:57*	*01/10/20 15:29*	*1*

Client Sample ID: P54-ROX-010720-EB

Lab Sample ID: 400-182255-3

Date Collected: 01/07/20 08:15
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 09:22	1
Acrolein	ND		20	10	ug/L			01/10/20 09:22	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 09:22	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 09:22	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 09:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 09:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 09:22	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 09:22	1
2-Butanone (MEK)	ND	*	25	2.6	ug/L			01/10/20 09:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 09:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 09:22	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 09:22	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 09:22	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 09:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 09:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 09:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 09:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 09:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 09:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 09:22	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 09:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 09:22	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 09:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 09:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 09:22	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 09:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 09:22	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 09:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 09:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 09:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 09:22	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 09:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 09:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 09:22	1

Client Sample ID: P54-ROX-010720-EB
Date Collected: 01/07/20 08:15
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 09:22	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 09:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 09:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 09:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 09:22	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 09:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 09:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 09:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 09:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 09:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 09:22	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 09:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 09:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 09:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 09:22	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 09:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 09:22	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 09:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*78 - 118*		*01/10/20 09:22*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/10/20 09:22*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/10/20 09:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Chrysene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 12:05	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:05	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*102*		*33 - 138*	*01/09/20 15:30*	*01/14/20 12:05*	*1*
2-Fluorobiphenyl	*108*		*15 - 122*	*01/09/20 15:30*	*01/14/20 12:05*	*1*

Client Sample ID: P54-ROX-010720-EB

Lab Sample ID: 400-182255-3

Date Collected: 01/07/20 08:15
Date Received: 01/08/20 08:56

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	97		19 - 130	01/09/20 15:30	01/14/20 12:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 14:31	1
Benzenethiol	ND	*	9.6	1.6	ug/L		01/09/20 15:30	01/14/20 14:31	1
Benzoic acid	ND		29	7.0	ug/L		01/09/20 15:30	01/14/20 14:31	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 14:31	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/09/20 15:30	01/14/20 14:31	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/09/20 15:30	01/14/20 14:31	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/09/20 15:30	01/14/20 14:31	1
Bis(2-ethylhexyl) phthalate	9.0	J	9.6	4.8	ug/L		01/09/20 15:30	01/14/20 14:31	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/09/20 15:30	01/14/20 14:31	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/09/20 15:30	01/14/20 14:31	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 14:31	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 14:31	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 14:31	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 14:31	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 14:31	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/09/20 15:30	01/14/20 14:31	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 14:31	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/09/20 15:30	01/14/20 14:31	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 14:31	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/09/20 15:30	01/14/20 14:31	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/09/20 15:30	01/14/20 14:31	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 14:31	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/09/20 15:30	01/14/20 14:31	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 14:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 14:31	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/09/20 15:30	01/14/20 14:31	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/09/20 15:30	01/14/20 14:31	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/09/20 15:30	01/14/20 14:31	1
Indene	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 14:31	1
Isophorone	ND		9.6	0.55	ug/L		01/09/20 15:30	01/14/20 14:31	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 14:31	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/09/20 15:30	01/14/20 14:31	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 14:31	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 14:31	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/09/20 15:30	01/14/20 14:31	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/09/20 15:30	01/14/20 14:31	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/09/20 15:30	01/14/20 14:31	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/09/20 15:30	01/14/20 14:31	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 14:31	1

Client Sample ID: P54-ROX-010720-EB
Date Collected: 01/07/20 08:15
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/09/20 15:30	01/14/20 14:31	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/09/20 15:30	01/14/20 14:31	1
Pentachlorophenol	ND		19	1.7	ug/L		01/09/20 15:30	01/14/20 14:31	1
Phenol	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 14:31	1
Pyridine	ND		9.6	3.1	ug/L		01/09/20 15:30	01/14/20 14:31	1
Quinoline	ND		9.6	5.8	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 14:31	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*34 - 120*	*01/09/20 15:30*	*01/14/20 14:31*	*1*
2-Fluorophenol	*44*		*10 - 120*	*01/09/20 15:30*	*01/14/20 14:31*	*1*
Nitrobenzene-d5	*80*		*27 - 120*	*01/09/20 15:30*	*01/14/20 14:31*	*1*
Phenol-d5	*69*		*10 - 120*	*01/09/20 15:30*	*01/14/20 14:31*	*1*
Terphenyl-d14	*93*		*53 - 125*	*01/09/20 15:30*	*01/14/20 14:31*	*1*
2,4,6-Tribromophenol	*77*		*15 - 135*	*01/09/20 15:30*	*01/14/20 14:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.030	0.0056	ug/L		01/09/20 09:57	01/10/20 16:42	1
1,2-Dibromoethane	ND	*	0.020	0.0051	ug/L		01/09/20 09:57	01/10/20 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*01/09/20 09:57*	*01/10/20 16:42*	*1*

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

Job ID: 400-182255-1

Client Sample ID: P54-ROX-010720
Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 09:49	1
Acrolein	ND		20	10	ug/L			01/10/20 09:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 09:49	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 09:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 09:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 09:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 09:49	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 09:49	1
2-Butanone (MEK)	ND	F1 * UJ	25	2.6	ug/L			01/10/20 09:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 09:49	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/10/20 09:49	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 09:49	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 09:49	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 09:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 09:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 09:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 09:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 09:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 09:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 09:49	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 09:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 09:49	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 09:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 09:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 09:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 09:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 09:49	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 09:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 09:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 09:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 09:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 09:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 09:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 09:49	1

Client Sample ID: P54-ROX-010720

Lab Sample ID: 400-182255-4

Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 09:49	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 09:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 09:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 09:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 09:49	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 09:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 09:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 09:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 09:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 09:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 09:49	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 09:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 09:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 09:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 09:49	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 09:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 09:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 09:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*01/10/20 09:49*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/10/20 09:49*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*01/10/20 09:49*	*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	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Chrysene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 12:23	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:23	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*33 - 138*	*01/09/20 15:30*	*01/14/20 12:23*	*1*
2-Fluorobiphenyl	*104*		*15 - 122*	*01/09/20 15:30*	*01/14/20 12:23*	*1*

Client Sample ID: P54-ROX-010720
Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*93*		*19 - 130*	*01/09/20 15:30*	*01/14/20 12:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 14:53	1
Benzenethiol	ND	UJ	9.6	1.6	ug/L		01/09/20 15:30	01/14/20 14:53	1
Benzoic acid	ND		29	7.0	ug/L		01/09/20 15:30	01/14/20 14:53	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 14:53	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/09/20 15:30	01/14/20 14:53	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/09/20 15:30	01/14/20 14:53	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/09/20 15:30	01/14/20 14:53	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/09/20 15:30	01/14/20 14:53	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/09/20 15:30	01/14/20 14:53	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/09/20 15:30	01/14/20 14:53	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 14:53	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 14:53	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 14:53	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 14:53	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 14:53	1
Dibenz[a,h]acridine	ND	UJ	9.6	2.9	ug/L		01/09/20 15:30	01/14/20 14:53	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 14:53	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/09/20 15:30	01/14/20 14:53	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 14:53	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/09/20 15:30	01/14/20 14:53	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/09/20 15:30	01/14/20 14:53	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 14:53	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/09/20 15:30	01/14/20 14:53	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 14:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 14:53	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/09/20 15:30	01/14/20 14:53	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/09/20 15:30	01/14/20 14:53	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/09/20 15:30	01/14/20 14:53	1
Indene	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 14:53	1
Isophorone	ND		9.6	0.55	ug/L		01/09/20 15:30	01/14/20 14:53	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 14:53	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/09/20 15:30	01/14/20 14:53	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 14:53	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 14:53	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/09/20 15:30	01/14/20 14:53	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/09/20 15:30	01/14/20 14:53	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/09/20 15:30	01/14/20 14:53	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/09/20 15:30	01/14/20 14:53	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 14:53	1

Client Sample ID: P54-ROX-010720
Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/09/20 15:30	01/14/20 14:53	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/09/20 15:30	01/14/20 14:53	1
Pentachlorophenol	2.2	J	19	1.7	ug/L		01/09/20 15:30	01/14/20 14:53	1
Phenol	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 14:53	1
Pyridine	ND		9.6	3.1	ug/L		01/09/20 15:30	01/14/20 14:53	1
Quinoline	ND	U	9.6	5.7	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/09/20 15:30	01/14/20 14:53	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*01/09/20 15:30*	*01/14/20 14:53*	*1*
2-Fluorophenol	*52*		*10 - 120*	*01/09/20 15:30*	*01/14/20 14:53*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*01/09/20 15:30*	*01/14/20 14:53*	*1*
Phenol-d5	*62*		*10 - 120*	*01/09/20 15:30*	*01/14/20 14:53*	*1*
Terphenyl-d14	*77*		*53 - 125*	*01/09/20 15:30*	*01/14/20 14:53*	*1*
2,4,6-Tribromophenol	*62*		*15 - 135*	*01/09/20 15:30*	*01/14/20 14:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/09/20 15:30	01/31/20 13:21	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	*	0.031	0.0056	ug/L		01/09/20 09:57	01/10/20 17:02	1
1,2-Dibromoethane	ND	*	0.021	0.0051	ug/L		01/09/20 09:57	01/10/20 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*01/09/20 09:57*	*01/10/20 17:02*	*1*

Client Sample ID: MW24-ROX-010720
Date Collected: 01/07/20 10:10
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 14:22	1
Acrolein	ND		20	10	ug/L			01/10/20 14:22	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 14:22	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 14:22	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 14:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 14:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 14:22	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 14:22	1
2-Butanone (MEK)	ND *	UJ	25	2.6	ug/L			01/10/20 14:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 14:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 14:22	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 14:22	1
1-Chlorohexane	ND *		1.0	0.70	ug/L			01/10/20 14:22	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 14:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 14:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 14:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 14:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 14:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 14:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 14:22	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 14:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 14:22	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 14:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 14:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 14:22	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 14:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 14:22	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 14:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 14:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 14:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 14:22	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 14:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 14:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 14:22	1

Client Sample ID: MW24-ROX-010720
Date Collected: 01/07/20 10:10
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 14:22	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 14:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 14:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 14:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 14:22	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 14:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 14:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 14:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 14:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 14:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 14:22	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 14:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 14:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 14:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 14:22	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 14:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 14:22	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*01/10/20 14:22*	*1*
Dibromofluoromethane	*107*		*81 - 121*		*01/10/20 14:22*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*01/10/20 14:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Chrysene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 12:41	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/09/20 15:30	01/14/20 12:41	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*33 - 138*	*01/09/20 15:30*	*01/14/20 12:41*	*1*
2-Fluorobiphenyl	*97*		*15 - 122*	*01/09/20 15:30*	*01/14/20 12:41*	*1*

Client Sample ID: MW24-ROX-010720
Date Collected: 01/07/20 10:10
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	87		19 - 130	01/09/20 15:30	01/14/20 12:41	1

* Do not use this data. Use re-extraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 15:14	1
Benzenethiol	ND	UJ	9.6	1.6	ug/L		01/09/20 15:30	01/14/20 15:14	1
Benzoic acid	ND		29	7.0	ug/L		01/09/20 15:30	01/14/20 15:14	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 15:14	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/09/20 15:30	01/14/20 15:14	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/09/20 15:30	01/14/20 15:14	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/09/20 15:30	01/14/20 15:14	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~67~~		~~9.6~~	~~4.8~~	~~ug/L~~		~~01/09/20 15:30~~	~~01/14/20 15:14~~	~~1~~
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/09/20 15:30	01/14/20 15:14	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/09/20 15:30	01/14/20 15:14	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 15:14	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 15:14	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 15:14	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 15:14	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 15:14	1
Dibenz[a,h]acridine	ND	UJ	9.6	2.9	ug/L		01/09/20 15:30	01/14/20 15:14	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 15:14	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/09/20 15:30	01/14/20 15:14	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 15:14	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/09/20 15:30	01/14/20 15:14	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/09/20 15:30	01/14/20 15:14	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 15:14	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/09/20 15:30	01/14/20 15:14	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 15:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 15:14	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/09/20 15:30	01/14/20 15:14	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/09/20 15:30	01/14/20 15:14	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/09/20 15:30	01/14/20 15:14	1
Indene	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 15:14	1
Isophorone	ND		9.6	0.55	ug/L		01/09/20 15:30	01/14/20 15:14	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 15:14	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/09/20 15:30	01/14/20 15:14	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 15:14	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 15:14	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/09/20 15:30	01/14/20 15:14	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/09/20 15:30	01/14/20 15:14	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/09/20 15:30	01/14/20 15:14	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/09/20 15:30	01/14/20 15:14	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 15:14	1

Client Sample ID: MW24-ROX-010720
Date Collected: 01/07/20 10:10
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/09/20 15:30	01/14/20 15:14	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/09/20 15:30	01/14/20 15:14	1
Pentachlorophenol	2.5	J	19	1.7	ug/L		01/09/20 15:30	01/14/20 15:14	1
Phenol	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 15:14	1
Pyridine	ND		9.6	3.1	ug/L		01/09/20 15:30	01/14/20 15:14	1
Quinoline	ND	UJ	9.6	5.7	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/09/20 15:30	01/14/20 15:14	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*01/09/20 15:30*	*01/14/20 15:14*	*1*
2-Fluorophenol	*29*		*10 - 120*	*01/09/20 15:30*	*01/14/20 15:14*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*01/09/20 15:30*	*01/14/20 15:14*	*1*
Phenol-d5	*43*		*10 - 120*	*01/09/20 15:30*	*01/14/20 15:14*	*1*
Terphenyl-d14	*80*		*53 - 125*	*01/09/20 15:30*	*01/14/20 15:14*	*1*
2,4,6-Tribromophenol	*46*		*15 - 135*	*01/09/20 15:30*	*01/14/20 15:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/09/20 15:30	02/06/20 14:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	HUJ	9.6	4.8	ug/L		02/03/20 11:34	02/07/20 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*34 - 120*	*02/03/20 11:34*	*02/07/20 01:10*	*1*
2-Fluorophenol	*48*		*10 - 120*	*02/03/20 11:34*	*02/07/20 01:10*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*02/03/20 11:34*	*02/07/20 01:10*	*1*
Phenol-d5	*53*		*10 - 120*	*02/03/20 11:34*	*02/07/20 01:10*	*1*
Terphenyl-d14	*62*		*53 - 125*	*02/03/20 11:34*	*02/07/20 01:10*	*1*
2,4,6-Tribromophenol	*46*		*15 - 135*	*02/03/20 11:34*	*02/07/20 01:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.033	0.0060	ug/L		01/10/20 09:24	01/17/20 11:14	1
1,2-Dibromoethane	ND		0.022	0.0054	ug/L		01/10/20 09:24	01/17/20 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*131*		*51 - 149*	*01/10/20 09:24*	*01/17/20 11:14*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: MW11-ROX-010720
Date Collected: 01/07/20 10:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 14:49	1
Acrolein	ND		20	10	ug/L			01/10/20 14:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 14:49	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 14:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 14:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 14:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 14:49	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 14:49	1
2-Butanone (MEK)	ND *	UJ	25	2.6	ug/L			01/10/20 14:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 14:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 14:49	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 14:49	1
1-Chlorohexane	ND *		1.0	0.70	ug/L			01/10/20 14:49	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 14:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 14:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 14:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 14:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 14:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 14:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 14:49	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 14:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 14:49	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 14:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 14:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 14:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 14:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 14:49	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 14:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 14:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 14:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 14:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 14:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 14:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 14:49	1

Client Sample ID: MW11-ROX-010720
Date Collected: 01/07/20 10:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 14:49	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 14:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 14:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 14:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 14:49	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 14:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 14:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 14:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 14:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 14:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 14:49	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 14:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 14:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 14:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 14:49	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 14:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 14:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*78 - 118*		*01/10/20 14:49*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*01/10/20 14:49*	*1*
Toluene-d8 (Surr)	*114*		*80 - 120*		*01/10/20 14:49*	*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	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
Anthracene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Benzo[a]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Benzo[b]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Benzo[g,h,i]perylene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Chrysene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Dibenz(a,h)anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Fluoranthene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
Fluorene	ND		0.20	0.021	ug/L		01/09/20 15:30	01/14/20 12:59	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 12:59	1
Phenanthrene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
Pyrene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*33 - 138*	*01/09/20 15:30*	*01/14/20 12:59*	*1*
2-Fluorobiphenyl	*82*		*15 - 122*	*01/09/20 15:30*	*01/14/20 12:59*	*1*

Client Sample ID: MW11-ROX-010720
Date Collected: 01/07/20 10:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	64		19 - 130	01/09/20 15:30	01/14/20 12:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/09/20 15:30	01/14/20 15:33	1
Benzenethiol	ND	UJ	9.8	1.7	ug/L		01/09/20 15:30	01/14/20 15:33	1
Benzoic acid	ND		29	7.2	ug/L		01/09/20 15:30	01/14/20 15:33	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 15:33	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 15:33	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		01/09/20 15:30	01/14/20 15:33	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		01/09/20 15:30	01/14/20 15:33	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/09/20 15:30	01/14/20 15:33	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		01/09/20 15:30	01/14/20 15:33	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 15:33	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/09/20 15:30	01/14/20 15:33	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/09/20 15:30	01/14/20 15:33	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		01/09/20 15:30	01/14/20 15:33	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 15:33	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 15:33	1
Dibenz[a,h]acridine	ND	UJ	9.8	2.9	ug/L		01/09/20 15:30	01/14/20 15:33	1
Dibenzofuran	ND		9.8	0.51	ug/L		01/09/20 15:30	01/14/20 15:33	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/09/20 15:30	01/14/20 15:33	1
Diethyl phthalate	ND		9.8	0.69	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 15:33	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		01/09/20 15:30	01/14/20 15:33	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/09/20 15:30	01/14/20 15:33	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 15:33	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		01/09/20 15:30	01/14/20 15:33	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 15:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 15:33	1
Hexachlorobenzene	ND		9.8	0.24	ug/L		01/09/20 15:30	01/14/20 15:33	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		01/09/20 15:30	01/14/20 15:33	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/09/20 15:30	01/14/20 15:33	1
Indene	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 15:33	1
Isophorone	ND		9.8	0.56	ug/L		01/09/20 15:30	01/14/20 15:33	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 15:33	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/09/20 15:30	01/14/20 15:33	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 15:33	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 15:33	1
4-Nitroaniline	ND		9.8	2.4	ug/L		01/09/20 15:30	01/14/20 15:33	1
Nitrobenzene	ND		9.8	0.54	ug/L		01/09/20 15:30	01/14/20 15:33	1
2-Nitrophenol	ND		9.8	0.64	ug/L		01/09/20 15:30	01/14/20 15:33	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/09/20 15:30	01/14/20 15:33	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 15:33	1

Client Sample ID: MW11-ROX-010720
Date Collected: 01/07/20 10:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-6
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		01/09/20 15:30	01/14/20 15:33	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		01/09/20 15:30	01/14/20 15:33	1
Pentachlorophenol	ND		20	1.8	ug/L		01/09/20 15:30	01/14/20 15:33	1
Phenol	ND		9.8	2.5	ug/L		01/09/20 15:30	01/14/20 15:33	1
Pyridine	ND		9.8	3.1	ug/L		01/09/20 15:30	01/14/20 15:33	1
Quinoline	ND		9.8	5.9	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/09/20 15:30	01/14/20 15:33	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*40*		*34 - 120*	*01/09/20 15:30*	*01/14/20 15:33*	*1*
2-Fluorophenol	*32*		*10 - 120*	*01/09/20 15:30*	*01/14/20 15:33*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*01/09/20 15:30*	*01/14/20 15:33*	*1*
Phenol-d5	*47*		*10 - 120*	*01/09/20 15:30*	*01/14/20 15:33*	*1*
Terphenyl-d14	*76*		*53 - 125*	*01/09/20 15:30*	*01/14/20 15:33*	*1*
2,4,6-Tribromophenol	*43*		*15 - 135*	*01/09/20 15:30*	*01/14/20 15:33*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.032	0.0059	ug/L		01/10/20 09:24	01/17/20 11:35	1
1,2-Dibromoethane	ND		0.022	0.0054	ug/L		01/10/20 09:24	01/17/20 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*01/10/20 09:24*	*01/17/20 11:35*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: MW27-ROX-010720
Date Collected: 01/07/20 11:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 15:16	1
Acrolein	ND		20	10	ug/L			01/10/20 15:16	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 15:16	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 15:16	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 15:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 15:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 15:16	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 15:16	1
2-Butanone (MEK)	ND	* UJ	25	2.6	ug/L			01/10/20 15:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 15:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 15:16	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 15:16	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 15:16	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 15:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 15:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 15:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 15:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 15:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 15:16	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 15:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 15:16	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 15:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 15:16	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 15:16	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 15:16	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 15:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 15:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 15:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 15:16	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 15:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 15:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 15:16	1

Client Sample ID: MW27-ROX-010720

Lab Sample ID: 400-182255-7

Date Collected: 01/07/20 11:55
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 15:16	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 15:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 15:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 15:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 15:16	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 15:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 15:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 15:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 15:16	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 15:16	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 15:16	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 15:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 15:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 15:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 15:16	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 15:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 15:16	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*78 - 118*		*01/10/20 15:16*	*1*
Dibromofluoromethane	*107*		*81 - 121*		*01/10/20 15:16*	*1*
Toluene-d8 (Surr)	*116*		*80 - 120*		*01/10/20 15:16*	*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	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Chrysene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 13:17	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:17	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*33 - 138*	*01/09/20 15:30*	*01/14/20 13:17*	*1*
2-Fluorobiphenyl	*120*		*15 - 122*	*01/09/20 15:30*	*01/14/20 13:17*	*1*

Client Sample ID: MW27-ROX-010720
Date Collected: 01/07/20 11:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-7
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*19 - 130*	*01/09/20 15:30*	*01/14/20 13:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	* UJ	9.7	3.7	ug/L		01/09/20 15:30	01/14/20 15:57	1
Benzenethiol	ND		9.7	1.6	ug/L		01/09/20 15:30	01/14/20 15:57	1
Benzoic acid	ND		29	7.1	ug/L		01/09/20 15:30	01/14/20 15:57	1
Benzyl alcohol	ND		9.7	1.9	ug/L		01/09/20 15:30	01/14/20 15:57	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		01/09/20 15:30	01/14/20 15:57	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		01/09/20 15:30	01/14/20 15:57	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		01/09/20 15:30	01/14/20 15:57	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		01/09/20 15:30	01/14/20 15:57	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		01/09/20 15:30	01/14/20 15:57	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		01/09/20 15:30	01/14/20 15:57	1
4-Chloroaniline	ND		9.7	3.3	ug/L		01/09/20 15:30	01/14/20 15:57	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		01/09/20 15:30	01/14/20 15:57	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		01/09/20 15:30	01/14/20 15:57	1
2-Chlorophenol	ND		9.7	2.1	ug/L		01/09/20 15:30	01/14/20 15:57	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		01/09/20 15:30	01/14/20 15:57	1
Dibenz[a,h]acridine	ND	UJ	9.7	2.9	ug/L		01/09/20 15:30	01/14/20 15:57	1
Dibenzofuran	ND		9.7	0.50	ug/L		01/09/20 15:30	01/14/20 15:57	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		01/09/20 15:30	01/14/20 15:57	1
Diethyl phthalate	ND		9.7	0.68	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		01/09/20 15:30	01/14/20 15:57	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		01/09/20 15:30	01/14/20 15:57	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		01/09/20 15:30	01/14/20 15:57	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		01/09/20 15:30	01/14/20 15:57	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		01/09/20 15:30	01/14/20 15:57	1
1,4-Dioxane	ND		9.7	0.97	ug/L		01/09/20 15:30	01/14/20 15:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		01/09/20 15:30	01/14/20 15:57	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		01/09/20 15:30	01/14/20 15:57	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/09/20 15:30	01/14/20 15:57	1
Hexachloroethane	ND		9.7	4.1	ug/L		01/09/20 15:30	01/14/20 15:57	1
Indene	ND		9.7	0.97	ug/L		01/09/20 15:30	01/14/20 15:57	1
Isophorone	ND		9.7	0.55	ug/L		01/09/20 15:30	01/14/20 15:57	1
2-Methylphenol	ND		9.7	1.7	ug/L		01/09/20 15:30	01/14/20 15:57	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/09/20 15:30	01/14/20 15:57	1
2-Nitroaniline	ND		9.7	2.1	ug/L		01/09/20 15:30	01/14/20 15:57	1
3-Nitroaniline	ND		9.7	1.7	ug/L		01/09/20 15:30	01/14/20 15:57	1
4-Nitroaniline	ND		9.7	2.4	ug/L		01/09/20 15:30	01/14/20 15:57	1
Nitrobenzene	ND		9.7	0.53	ug/L		01/09/20 15:30	01/14/20 15:57	1
2-Nitrophenol	ND		9.7	0.63	ug/L		01/09/20 15:30	01/14/20 15:57	1
4-Nitrophenol	ND		9.7	2.0	ug/L		01/09/20 15:30	01/14/20 15:57	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		01/09/20 15:30	01/14/20 15:57	1

Client Sample ID: MW27-ROX-010720
Date Collected: 01/07/20 11:55
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-7
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		9.7	3.2	ug/L		01/09/20 15:30	01/14/20 15:57	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		01/09/20 15:30	01/14/20 15:57	1
Pentachlorophenol	ND		19	1.8	ug/L		01/09/20 15:30	01/14/20 15:57	1
Phenol	ND		9.7	2.5	ug/L		01/09/20 15:30	01/14/20 15:57	1
Pyridine	ND		9.7	3.1	ug/L		01/09/20 15:30	01/14/20 15:57	1
Quinoline	ND	U3	9.7	5.8	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		01/09/20 15:30	01/14/20 15:57	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/09/20 15:30	01/14/20 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*01/09/20 15:30*	*01/14/20 15:57*	*1*
2-Fluorophenol	*47*		*10 - 120*	*01/09/20 15:30*	*01/14/20 15:57*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*01/09/20 15:30*	*01/14/20 15:57*	*1*
Phenol-d5	*60*		*10 - 120*	*01/09/20 15:30*	*01/14/20 15:57*	*1*
Terphenyl-d14	*78*		*53 - 125*	*01/09/20 15:30*	*01/14/20 15:57*	*1*
2,4,6-Tribromophenol	*47*		*15 - 135*	*01/09/20 15:30*	*01/14/20 15:57*	*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		01/10/20 09:24	01/17/20 11:55	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/10/20 09:24	01/17/20 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*51 - 149*	*01/10/20 09:24*	*01/17/20 11:55*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: MW12-ROX-010720
Date Collected: 01/07/20 13:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 15:43	1
Acrolein	ND		20	10	ug/L			01/10/20 15:43	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 15:43	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 15:43	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 15:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 15:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 15:43	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 15:43	1
2-Butanone (MEK)	ND	* UJ	25	2.6	ug/L			01/10/20 15:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 15:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 15:43	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 15:43	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 15:43	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 15:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 15:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 15:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 15:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 15:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 15:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 15:43	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 15:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 15:43	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 15:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 15:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 15:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 15:43	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 15:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 15:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 15:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 15:43	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 15:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 15:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 15:43	1

Client Sample ID: MW12-ROX-010720
Date Collected: 01/07/20 13:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 15:43	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 15:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 15:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 15:43	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 15:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 15:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 15:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 15:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 15:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 15:43	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 15:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 15:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 15:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 15:43	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 15:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 15:43	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*78 - 118*		*01/10/20 15:43*	*1*
Dibromofluoromethane	*107*		*81 - 121*		*01/10/20 15:43*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/10/20 15:43*	*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	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Chrysene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 13:35	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 13:35	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*33 - 138*	*01/09/20 15:30*	*01/14/20 13:35*	*1*
2-Fluorobiphenyl	*111*		*15 - 122*	*01/09/20 15:30*	*01/14/20 13:35*	*1*

Client Sample ID: MW12-ROX-010720
Date Collected: 01/07/20 13:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	96		19 - 130	01/09/20 15:30	01/14/20 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/09/20 15:30	01/14/20 16:18	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/09/20 15:30	01/14/20 16:18	1
Benzoic acid	ND		29	7.0	ug/L		01/09/20 15:30	01/14/20 16:18	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 16:18	1
Bis(2-chloroethoxy)methane	ND		9.6	0.67	ug/L		01/09/20 15:30	01/14/20 16:18	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/09/20 15:30	01/14/20 16:18	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/09/20 15:30	01/14/20 16:18	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/09/20 15:30	01/14/20 16:18	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/09/20 15:30	01/14/20 16:18	1
Butyl benzyl phthalate	ND		9.6	0.67	ug/L		01/09/20 15:30	01/14/20 16:18	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/09/20 15:30	01/14/20 16:18	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/09/20 15:30	01/14/20 16:18	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 16:18	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 16:18	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 16:18	1
Dibenz[a,h]acridine	ND	UJ	9.6	2.9	ug/L		01/09/20 15:30	01/14/20 16:18	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/09/20 15:30	01/14/20 16:18	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/09/20 15:30	01/14/20 16:18	1
Diethyl phthalate	ND		9.6	0.68	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 16:18	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/09/20 15:30	01/14/20 16:18	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/09/20 15:30	01/14/20 16:18	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/09/20 15:30	01/14/20 16:18	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/09/20 15:30	01/14/20 16:18	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 16:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 16:18	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/09/20 15:30	01/14/20 16:18	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/09/20 15:30	01/14/20 16:18	1
Hexachloroethane	ND		9.6	4.1	ug/L		01/09/20 15:30	01/14/20 16:18	1
Indene	ND		9.6	0.96	ug/L		01/09/20 15:30	01/14/20 16:18	1
Isophorone	ND		9.6	0.55	ug/L		01/09/20 15:30	01/14/20 16:18	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 16:18	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/09/20 15:30	01/14/20 16:18	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/09/20 15:30	01/14/20 16:18	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/09/20 15:30	01/14/20 16:18	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/09/20 15:30	01/14/20 16:18	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/09/20 15:30	01/14/20 16:18	1
2-Nitrophenol	ND		9.6	0.63	ug/L		01/09/20 15:30	01/14/20 16:18	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/09/20 15:30	01/14/20 16:18	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 16:18	1

Client Sample ID: MW12-ROX-010720
Date Collected: 01/07/20 13:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-8
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		9.6	3.2	ug/L		01/09/20 15:30	01/14/20 16:18	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/09/20 15:30	01/14/20 16:18	1
Pentachlorophenol	ND		19	1.7	ug/L		01/09/20 15:30	01/14/20 16:18	1
Phenol	ND		9.6	2.5	ug/L		01/09/20 15:30	01/14/20 16:18	1
Pyridine	ND		9.6	3.1	ug/L		01/09/20 15:30	01/14/20 16:18	1
Quinoline	ND	U5	9.6	5.8	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/09/20 15:30	01/14/20 16:18	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/09/20 15:30	01/14/20 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*34 - 120*	*01/09/20 15:30*	*01/14/20 16:18*	*1*
2-Fluorophenol	*12*		*10 - 120*	*01/09/20 15:30*	*01/14/20 16:18*	*1*
Nitrobenzene-d5	*91*		*27 - 120*	*01/09/20 15:30*	*01/14/20 16:18*	*1*
Phenol-d5	*17*		*10 - 120*	*01/09/20 15:30*	*01/14/20 16:18*	*1*
Terphenyl-d14	*87*		*53 - 125*	*01/09/20 15:30*	*01/14/20 16:18*	*1*
2,4,6-Tribromophenol	*13*	*X*	*15 - 135*	*01/09/20 15:30*	*01/14/20 16:18*	*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	*	0.036	0.0067	ug/L		01/10/20 09:24	01/17/20 12:15	1
1,2-Dibromoethane	ND		0.024	0.0061	ug/L		01/10/20 09:24	01/17/20 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*01/10/20 09:24*	*01/17/20 12:15*	*1*

Client Sample ID: TB-ROX-010720-8260-B

Lab Sample ID: 400-182255-9

Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 13:28	1
Acrolein	ND		20	10	ug/L			01/10/20 13:28	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 13:28	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 13:28	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 13:28	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 13:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 13:28	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 13:28	1
2-Butanone (MEK)	ND	*	25	2.6	ug/L			01/10/20 13:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 13:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 13:28	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 13:28	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 13:28	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 13:28	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 13:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 13:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 13:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 13:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 13:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 13:28	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 13:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 13:28	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 13:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 13:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 13:28	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 13:28	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 13:28	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 13:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 13:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 13:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 13:28	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 13:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 13:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 13:28	1

Client Sample ID: TB-ROX-010720-8260-B
Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 13:28	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 13:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 13:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 13:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 13:28	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 13:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 13:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 13:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 13:28	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:28	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 13:28	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 13:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 13:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 13:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 13:28	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 13:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 13:28	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*78 - 118*		*01/10/20 13:28*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*01/10/20 13:28*	*1*
Toluene-d8 (Surr)	*113*		*80 - 120*		*01/10/20 13:28*	*1*

Client Sample ID: TB-ROX-010720-8011-B
Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-10
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.030	0.0054	ug/L		01/10/20 09:24	01/17/20 12:35	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		01/10/20 09:24	01/17/20 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*126*		*51 - 149*	*01/10/20 09:24*	*01/17/20 12:35*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: MW14-ROX-010720-EB
Date Collected: 01/07/20 08:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 13:55	1
Acrolein	ND		20	10	ug/L			01/10/20 13:55	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 13:55	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 13:55	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 13:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 13:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 13:55	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 13:55	1
2-Butanone (MEK)	ND	*	25	2.6	ug/L			01/10/20 13:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 13:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 13:55	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 13:55	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 13:55	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 13:55	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 13:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 13:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 13:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 13:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 13:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 13:55	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 13:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 13:55	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 13:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 13:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 13:55	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 13:55	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 13:55	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 13:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 13:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 13:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 13:55	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 13:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 13:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 13:55	1

Client Sample ID: MW14-ROX-010720-EB
Date Collected: 01/07/20 08:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 13:55	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 13:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 13:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 13:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 13:55	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 13:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 13:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 13:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 13:55	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 13:55	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 13:55	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 13:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 13:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 13:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 13:55	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 13:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 13:55	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*78 - 118*		*01/10/20 13:55*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*01/10/20 13:55*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/10/20 13:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
Anthracene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Benzo[a]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Benzo[b]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Benzo[g,h,i]perylene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Chrysene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Dibenz(a,h)anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Fluoranthene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
Fluorene	ND		0.20	0.021	ug/L		01/09/20 15:30	01/14/20 13:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 13:53	1
Phenanthrene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
Pyrene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*71*		*33 - 138*	*01/09/20 15:30*	*01/14/20 13:53*	*1*
2-Fluorobiphenyl	*95*		*15 - 122*	*01/09/20 15:30*	*01/14/20 13:53*	*1*

Client Sample ID: MW14-ROX-010720-EB
Date Collected: 01/07/20 08:40
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-11
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	01/09/20 15:30	01/14/20 13:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/09/20 15:30	01/14/20 16:40	1
Benzenethiol	ND	*	9.8	1.7	ug/L		01/09/20 15:30	01/14/20 16:40	1
Benzoic acid	ND		29	7.2	ug/L		01/09/20 15:30	01/14/20 16:40	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 16:40	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 16:40	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		01/09/20 15:30	01/14/20 16:40	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		01/09/20 15:30	01/14/20 16:40	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/09/20 15:30	01/14/20 16:40	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		01/09/20 15:30	01/14/20 16:40	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 16:40	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/09/20 15:30	01/14/20 16:40	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/09/20 15:30	01/14/20 16:40	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		01/09/20 15:30	01/14/20 16:40	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 16:40	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 16:40	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		01/09/20 15:30	01/14/20 16:40	1
Dibenzofuran	ND		9.8	0.51	ug/L		01/09/20 15:30	01/14/20 16:40	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/09/20 15:30	01/14/20 16:40	1
Diethyl phthalate	ND		9.8	0.69	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 16:40	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		01/09/20 15:30	01/14/20 16:40	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/09/20 15:30	01/14/20 16:40	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 16:40	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		01/09/20 15:30	01/14/20 16:40	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 16:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 16:40	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		01/09/20 15:30	01/14/20 16:40	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		01/09/20 15:30	01/14/20 16:40	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/09/20 15:30	01/14/20 16:40	1
Indene	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 16:40	1
Isophorone	ND		9.8	0.56	ug/L		01/09/20 15:30	01/14/20 16:40	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 16:40	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/09/20 15:30	01/14/20 16:40	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 16:40	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 16:40	1
4-Nitroaniline	ND		9.8	2.4	ug/L		01/09/20 15:30	01/14/20 16:40	1
Nitrobenzene	ND		9.8	0.54	ug/L		01/09/20 15:30	01/14/20 16:40	1
2-Nitrophenol	ND		9.8	0.64	ug/L		01/09/20 15:30	01/14/20 16:40	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/09/20 15:30	01/14/20 16:40	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 16:40	1

Client Sample ID: MW14-ROX-010720-EB

Lab Sample ID: 400-182255-11

Date Collected: 01/07/20 08:40
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/09/20 15:30	01/14/20 16:40	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		01/09/20 15:30	01/14/20 16:40	1
Pentachlorophenol	ND		20	1.8	ug/L		01/09/20 15:30	01/14/20 16:40	1
Phenol	ND		9.8	2.5	ug/L		01/09/20 15:30	01/14/20 16:40	1
Pyridine	ND		9.8	3.1	ug/L		01/09/20 15:30	01/14/20 16:40	1
Quinoline	ND		9.8	5.9	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/09/20 15:30	01/14/20 16:40	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*34 - 120*	*01/09/20 15:30*	*01/14/20 16:40*	*1*
2-Fluorophenol	*43*		*10 - 120*	*01/09/20 15:30*	*01/14/20 16:40*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*01/09/20 15:30*	*01/14/20 16:40*	*1*
Phenol-d5	*54*		*10 - 120*	*01/09/20 15:30*	*01/14/20 16:40*	*1*
Terphenyl-d14	*57*		*53 - 125*	*01/09/20 15:30*	*01/14/20 16:40*	*1*
2,4,6-Tribromophenol	*45*		*15 - 135*	*01/09/20 15:30*	*01/14/20 16:40*	*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	*	0.030	0.0054	ug/L		01/10/20 09:24	01/17/20 12:55	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		01/10/20 09:24	01/17/20 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*01/10/20 09:24*	*01/17/20 12:55*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: MW14-ROX-010720
Date Collected: 01/07/20 10:50
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 16:10	1
Acrolein	ND		20	10	ug/L			01/10/20 16:10	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 16:10	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 16:10	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 16:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 16:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 16:10	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 16:10	1
2-Butanone (MEK)	ND	* UJ	25	2.6	ug/L			01/10/20 16:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 16:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 16:10	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 16:10	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 16:10	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 16:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 16:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 16:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 16:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 16:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 16:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 16:10	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 16:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 16:10	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 16:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 16:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 16:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 16:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 16:10	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 16:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 16:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 16:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 16:10	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 16:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 16:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 16:10	1

Client Sample ID: MW14-ROX-010720
Date Collected: 01/07/20 10:50
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 16:10	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 16:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 16:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 16:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 16:10	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 16:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 16:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 16:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 16:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 16:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 16:10	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 16:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 16:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 16:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 16:10	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 16:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 16:10	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*78 - 118*		*01/10/20 16:10*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*01/10/20 16:10*	*1*
Toluene-d8 (Surr)	*113*		*80 - 120*		*01/10/20 16:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Chrysene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 14:11	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:11	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*33 - 138*	*01/09/20 15:30*	*01/14/20 14:11*	*1*
2-Fluorobiphenyl	*120*		*15 - 122*	*01/09/20 15:30*	*01/14/20 14:11*	*1*

Client Sample ID: MW14-ROX-010720
Date Collected: 01/07/20 10:50
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-12
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	106		19 - 130	01/09/20 15:30	01/14/20 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		01/09/20 15:30	01/14/20 17:01	1
Benzenethiol	ND	UJ	9.7	1.6	ug/L		01/09/20 15:30	01/14/20 17:01	1
Benzoic acid	ND		29	7.1	ug/L		01/09/20 15:30	01/14/20 17:01	1
Benzyl alcohol	ND		9.7	1.9	ug/L		01/09/20 15:30	01/14/20 17:01	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		01/09/20 15:30	01/14/20 17:01	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		01/09/20 15:30	01/14/20 17:01	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		01/09/20 15:30	01/14/20 17:01	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		01/09/20 15:30	01/14/20 17:01	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		01/09/20 15:30	01/14/20 17:01	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		01/09/20 15:30	01/14/20 17:01	1
4-Chloroaniline	ND		9.7	3.3	ug/L		01/09/20 15:30	01/14/20 17:01	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		01/09/20 15:30	01/14/20 17:01	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		01/09/20 15:30	01/14/20 17:01	1
2-Chlorophenol	ND		9.7	2.1	ug/L		01/09/20 15:30	01/14/20 17:01	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		01/09/20 15:30	01/14/20 17:01	1
Dibenz[a,h]acridine	ND	UJ	9.7	2.9	ug/L		01/09/20 15:30	01/14/20 17:01	1
Dibenzofuran	ND		9.7	0.50	ug/L		01/09/20 15:30	01/14/20 17:01	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		01/09/20 15:30	01/14/20 17:01	1
Diethyl phthalate	ND		9.7	0.68	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		01/09/20 15:30	01/14/20 17:01	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		01/09/20 15:30	01/14/20 17:01	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		01/09/20 15:30	01/14/20 17:01	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		01/09/20 15:30	01/14/20 17:01	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		01/09/20 15:30	01/14/20 17:01	1
1,4-Dioxane	ND		9.7	0.97	ug/L		01/09/20 15:30	01/14/20 17:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		01/09/20 15:30	01/14/20 17:01	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		01/09/20 15:30	01/14/20 17:01	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/09/20 15:30	01/14/20 17:01	1
Hexachloroethane	ND		9.7	4.1	ug/L		01/09/20 15:30	01/14/20 17:01	1
Indene	ND		9.7	0.97	ug/L		01/09/20 15:30	01/14/20 17:01	1
Isophorone	ND		9.7	0.55	ug/L		01/09/20 15:30	01/14/20 17:01	1
2-Methylphenol	ND		9.7	1.7	ug/L		01/09/20 15:30	01/14/20 17:01	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/09/20 15:30	01/14/20 17:01	1
2-Nitroaniline	ND		9.7	2.1	ug/L		01/09/20 15:30	01/14/20 17:01	1
3-Nitroaniline	ND		9.7	1.7	ug/L		01/09/20 15:30	01/14/20 17:01	1
4-Nitroaniline	ND		9.7	2.4	ug/L		01/09/20 15:30	01/14/20 17:01	1
Nitrobenzene	ND		9.7	0.53	ug/L		01/09/20 15:30	01/14/20 17:01	1
2-Nitrophenol	ND		9.7	0.63	ug/L		01/09/20 15:30	01/14/20 17:01	1
4-Nitrophenol	ND		9.7	2.0	ug/L		01/09/20 15:30	01/14/20 17:01	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		01/09/20 15:30	01/14/20 17:01	1

Client Sample ID: MW14-ROX-010720

Lab Sample ID: 400-182255-12

Date Collected: 01/07/20 10:50
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		01/09/20 15:30	01/14/20 17:01	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		01/09/20 15:30	01/14/20 17:01	1
Pentachlorophenol	2.4	J	19	1.8	ug/L		01/09/20 15:30	01/14/20 17:01	1
Phenol	ND		9.7	2.5	ug/L		01/09/20 15:30	01/14/20 17:01	1
Pyridine	ND		9.7	3.1	ug/L		01/09/20 15:30	01/14/20 17:01	1
Quinoline	ND	UJ	9.7	5.8	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		01/09/20 15:30	01/14/20 17:01	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/09/20 15:30	01/14/20 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*01/09/20 15:30*	*01/14/20 17:01*	*1*
2-Fluorophenol	*49*		*10 - 120*	*01/09/20 15:30*	*01/14/20 17:01*	*1*
Nitrobenzene-d5	*85*		*27 - 120*	*01/09/20 15:30*	*01/14/20 17:01*	*1*
Phenol-d5	*70*		*10 - 120*	*01/09/20 15:30*	*01/14/20 17:01*	*1*
Terphenyl-d14	*85*		*53 - 125*	*01/09/20 15:30*	*01/14/20 17:01*	*1*
2,4,6-Tribromophenol	*74*		*15 - 135*	*01/09/20 15:30*	*01/14/20 17:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.8	ug/L		01/09/20 15:30	01/31/20 14:09	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		01/10/20 09:24	01/17/20 13:15	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		01/10/20 09:24	01/17/20 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*01/10/20 09:24*	*01/17/20 13:15*	*1*

Client Sample ID: P66-ROX-010720

Lab Sample ID: 400-182255-13

Date Collected: 01/07/20 11:25
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 16:37	1
Acrolein	ND		20	10	ug/L			01/10/20 16:37	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 16:37	1
Benzene	0.59	J	1.0	0.38	ug/L			01/10/20 16:37	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 16:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 16:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 16:37	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 16:37	1
2-Butanone (MEK)	ND	* UJ	25	2.6	ug/L			01/10/20 16:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 16:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 16:37	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 16:37	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			01/10/20 16:37	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 16:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 16:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 16:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 16:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 16:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 16:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 16:37	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 16:37	1
Isopropylbenzene	28		1.0	0.53	ug/L			01/10/20 16:37	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 16:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 16:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 16:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 16:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 16:37	1
Naphthalene	47		1.0	1.0	ug/L			01/10/20 16:37	1
n-Butylbenzene	1.8		1.0	0.76	ug/L			01/10/20 16:37	1
N-Propylbenzene	34		1.0	0.69	ug/L			01/10/20 16:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 16:37	1
o-Xylene	0.65	J	5.0	0.60	ug/L			01/10/20 16:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 16:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 16:37	1

Client Sample ID: P66-ROX-010720
Date Collected: 01/07/20 11:25
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-13
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			01/10/20 16:37	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 16:37	1
tert-Butylbenzene	2.1		1.0	0.63	ug/L			01/10/20 16:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 16:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 16:37	1
Toluene	0.64	J	1.0	0.41	ug/L			01/10/20 16:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 16:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 16:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 16:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 16:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 16:37	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 16:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 16:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 16:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 16:37	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 16:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 16:37	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*01/10/20 16:37*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*01/10/20 16:37*	*1*
Toluene-d8 (Surr)	*113*		*80 - 120*		*01/10/20 16:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:29	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:29	1
Anthracene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:29	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Chrysene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Fluoranthene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:29	1
Fluorene	ND		0.19	0.020	ug/L		01/09/20 15:30	01/14/20 14:29	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/09/20 15:30	01/14/20 14:29	1
Phenanthrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:29	1
Pyrene	ND		0.19	0.019	ug/L		01/09/20 15:30	01/14/20 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 138*	*01/09/20 15:30*	*01/14/20 14:29*	*1*
2-Fluorobiphenyl	*55*		*15 - 122*	*01/09/20 15:30*	*01/14/20 14:29*	*1*
Nitrobenzene-d5	*97*		*19 - 130*	*01/09/20 15:30*	*01/14/20 14:29*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: P66-ROX-010720
Date Collected: 01/07/20 11:25
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-13
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
1-Methylnaphthalene	66		1.9	0.19	ug/L		01/09/20 15:30	01/16/20 11:51	10
2-Methylnaphthalene	42		1.9	0.19	ug/L		01/09/20 15:30	01/16/20 11:51	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	49	18	ug/L		01/09/20 15:30	01/14/20 17:23	5
Benzenethiol	ND	UJ	49	8.2	ug/L		01/09/20 15:30	01/14/20 17:23	5
Benzoic acid	ND		150	35	ug/L		01/09/20 15:30	01/14/20 17:23	5
Benzyl alcohol	ND		49	9.7	ug/L		01/09/20 15:30	01/14/20 17:23	5
Bis(2-chloroethoxy)methane	ND		49	3.3	ug/L		01/09/20 15:30	01/14/20 17:23	5
Bis(2-chloroethyl)ether	ND		49	3.6	ug/L		01/09/20 15:30	01/14/20 17:23	5
bis (2-chloroisopropyl) ether	ND		49	3.9	ug/L		01/09/20 15:30	01/14/20 17:23	5
Bis(2-ethylhexyl) phthalate	ND		49	24	ug/L		01/09/20 15:30	01/14/20 17:23	5
4-Bromophenyl phenyl ether	ND		49	1.6	ug/L		01/09/20 15:30	01/14/20 17:23	5
Butyl benzyl phthalate	ND		49	3.3	ug/L		01/09/20 15:30	01/14/20 17:23	5
4-Chloroaniline	ND		49	16	ug/L		01/09/20 15:30	01/14/20 17:23	5
4-Chloro-3-methylphenol	ND		49	18	ug/L		01/09/20 15:30	01/14/20 17:23	5
2-Chloronaphthalene	ND		49	2.5	ug/L		01/09/20 15:30	01/14/20 17:23	5
2-Chlorophenol	ND		49	11	ug/L		01/09/20 15:30	01/14/20 17:23	5
4-Chlorophenyl phenyl ether	ND		49	9.7	ug/L		01/09/20 15:30	01/14/20 17:23	5
Dibenz[a,h]acridine	ND		49	15	ug/L		01/09/20 15:30	01/14/20 17:23	5
Dibenzofuran	ND		49	2.5	ug/L		01/09/20 15:30	01/14/20 17:23	5
3,3'-Dichlorobenzidine	ND		49	13	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,4-Dichlorophenol	ND		49	15	ug/L		01/09/20 15:30	01/14/20 17:23	5
Diethyl phthalate	ND		49	3.4	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,4-Dimethylphenol	ND		49	17	ug/L		01/09/20 15:30	01/14/20 17:23	5
Dimethyl phthalate	ND		49	2.9	ug/L		01/09/20 15:30	01/14/20 17:23	5
Di-n-butyl phthalate	ND		49	13	ug/L		01/09/20 15:30	01/14/20 17:23	5
4,6-Dinitro-ortho-cresol	ND		49	9.7	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,4-Dinitrophenol	ND		150	16	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,4-Dinitrotoluene	ND		49	9.2	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,6-Dinitrotoluene	ND		49	9.2	ug/L		01/09/20 15:30	01/14/20 17:23	5
Di-n-octyl phthalate	ND		49	2.1	ug/L		01/09/20 15:30	01/14/20 17:23	5
1,4-Dioxane	ND		49	4.9	ug/L		01/09/20 15:30	01/14/20 17:23	5
1,2-Diphenylhydrazine (as Azobenzene)	ND		49	4.9	ug/L		01/09/20 15:30	01/14/20 17:23	5
Hexachlorobenzene	ND		49	1.2	ug/L		01/09/20 15:30	01/14/20 17:23	5
Hexachlorocyclopentadiene	ND		97	13	ug/L		01/09/20 15:30	01/14/20 17:23	5
Hexachloroethane	ND		49	20	ug/L		01/09/20 15:30	01/14/20 17:23	5
Indene	ND		49	4.9	ug/L		01/09/20 15:30	01/14/20 17:23	5
Isophorone	ND		49	2.8	ug/L		01/09/20 15:30	01/14/20 17:23	5
2-Methylphenol	ND		49	8.7	ug/L		01/09/20 15:30	01/14/20 17:23	5
3 & 4 Methylphenol	ND		97	5.0	ug/L		01/09/20 15:30	01/14/20 17:23	5
2-Nitroaniline	ND		49	11	ug/L		01/09/20 15:30	01/14/20 17:23	5
3-Nitroaniline	ND		49	8.7	ug/L		01/09/20 15:30	01/14/20 17:23	5
4-Nitroaniline	ND		49	12	ug/L		01/09/20 15:30	01/14/20 17:23	5
Nitrobenzene	ND		49	2.7	ug/L		01/09/20 15:30	01/14/20 17:23	5
2-Nitrophenol	ND		49	3.2	ug/L		01/09/20 15:30	01/14/20 17:23	5
4-Nitrophenol	ND		49	10	ug/L		01/09/20 15:30	01/14/20 17:23	5
N-Nitrosodimethylamine	ND		49	17	ug/L		01/09/20 15:30	01/14/20 17:23	5

Client Sample ID: P66-ROX-010720

Lab Sample ID: 400-182255-13

Date Collected: 01/07/20 11:25
Date Received: 01/08/20 08:56

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	U	49	16	ug/L		01/09/20 15:30	01/14/20 17:23	5
N-Nitrosodiphenylamine	ND		49	2.3	ug/L		01/09/20 15:30	01/14/20 17:23	5
Pentachlorophenol	ND		97	8.8	ug/L		01/09/20 15:30	01/14/20 17:23	5
Phenol	ND		49	13	ug/L		01/09/20 15:30	01/14/20 17:23	5
Pyridine	ND		49	16	ug/L		01/09/20 15:30	01/14/20 17:23	5
Quinoline	ND		49	29	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,4,5-Trichlorophenol	ND		49	18	ug/L		01/09/20 15:30	01/14/20 17:23	5
2,4,6-Trichlorophenol	ND		49	17	ug/L		01/09/20 15:30	01/14/20 17:23	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*01/09/20 15:30*	*01/14/20 17:23*	*5*
2-Fluorophenol	*42*		*10 - 120*	*01/09/20 15:30*	*01/14/20 17:23*	*5*
Nitrobenzene-d5	*70*		*27 - 120*	*01/09/20 15:30*	*01/14/20 17:23*	*5*
Phenol-d5	*72*		*10 - 120*	*01/09/20 15:30*	*01/14/20 17:23*	*5*
Terphenyl-d14	*66*		*53 - 125*	*01/09/20 15:30*	*01/14/20 17:23*	*5*
2,4,6-Tribromophenol	*95*		*15 - 135*	*01/09/20 15:30*	*01/14/20 17:23*	*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		01/10/20 09:24	01/17/20 13:56	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		01/10/20 09:24	01/17/20 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*01/10/20 09:24*	*01/17/20 13:56*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: ROST4PZC-ROX-010720
Date Collected: 01/07/20 13:35
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 17:04	1
Acrolein	ND		20	10	ug/L			01/10/20 17:04	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 17:04	1
Benzene	1.4		1.0	0.38	ug/L			01/10/20 17:04	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 17:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 17:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 17:04	1
Bromomethane	ND	UJ	1.0	0.98	ug/L			01/10/20 17:04	1
2-Butanone (MEK)	ND *	UJ	25	2.6	ug/L			01/10/20 17:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 17:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 17:04	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 17:04	1
1-Chlorohexane	ND *		1.0	0.70	ug/L			01/10/20 17:04	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 17:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 17:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 17:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 17:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 17:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Ethylbenzene	17		1.0	0.50	ug/L			01/10/20 17:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 17:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 17:04	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 17:04	1
Isopropylbenzene	2.1		1.0	0.53	ug/L			01/10/20 17:04	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 17:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 17:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 17:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 17:04	1
m-Xylene & p-Xylene	23		5.0	1.6	ug/L			01/10/20 17:04	1
Naphthalene	22		1.0	1.0	ug/L			01/10/20 17:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 17:04	1
N-Propylbenzene	3.1		1.0	0.69	ug/L			01/10/20 17:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 17:04	1
o-Xylene	0.93	J	5.0	0.60	ug/L			01/10/20 17:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 17:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 17:04	1

Client Sample ID: ROST4PZC-ROX-010720
Date Collected: 01/07/20 13:35
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 17:04	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 17:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 17:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 17:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 17:04	1
Toluene	2.3		1.0	0.41	ug/L			01/10/20 17:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 17:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 17:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 17:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 17:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 17:04	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 17:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 17:04	1
1,2,4-Trimethylbenzene	7.7		1.0	0.82	ug/L			01/10/20 17:04	1
1,3,5-Trimethylbenzene	0.73	J	1.0	0.56	ug/L			01/10/20 17:04	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 17:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 17:04	1
Xylenes, Total	24		10	1.6	ug/L			01/10/20 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*78 - 118*		*01/10/20 17:04*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/10/20 17:04*	*1*
Toluene-d8 (Surr)	*115*		*80 - 120*		*01/10/20 17:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.4		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1
Anthracene	0.38		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Benzo[a]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Benzo[b]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Benzo[g,h,i]perylene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Chrysene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Dibenz(a,h)anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Fluoranthene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 14:47	1
Phenanthrene	3.0		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1
Pyrene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1
2-Methylnaphthalene	13		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*33 - 138*	*01/09/20 15:30*	*01/14/20 14:47*	*1*
2-Fluorobiphenyl	*87*		*15 - 122*	*01/09/20 15:30*	*01/14/20 14:47*	*1*
Nitrobenzene-d5	*76*		*19 - 130*	*01/09/20 15:30*	*01/14/20 14:47*	*1*

Client Sample ID: ROST4PZC-ROX-010720
Date Collected: 01/07/20 13:35
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-14
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	0.98		0.98	0.10	ug/L		01/09/20 15:30	01/16/20 12:28	5
1-Methylnaphthalene	24		0.98	0.098	ug/L		01/09/20 15:30	01/16/20 12:28	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		01/09/20 15:30	01/14/20 17:44	1
Benzenethiol	ND	* UJ	9.8	1.7	ug/L		01/09/20 15:30	01/14/20 17:44	1
Benzoic acid	ND		29	7.2	ug/L		01/09/20 15:30	01/14/20 17:44	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 17:44	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 17:44	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		01/09/20 15:30	01/14/20 17:44	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		01/09/20 15:30	01/14/20 17:44	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/09/20 15:30	01/14/20 17:44	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		01/09/20 15:30	01/14/20 17:44	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 17:44	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/09/20 15:30	01/14/20 17:44	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/09/20 15:30	01/14/20 17:44	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		01/09/20 15:30	01/14/20 17:44	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 17:44	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 17:44	1
Dibenz[a,h]acridine	ND	UJ	9.8	2.9	ug/L		01/09/20 15:30	01/14/20 17:44	1
Dibenzofuran	0.82	J	9.8	0.51	ug/L		01/09/20 15:30	01/14/20 17:44	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/09/20 15:30	01/14/20 17:44	1
Diethyl phthalate	ND		9.8	0.69	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 17:44	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		01/09/20 15:30	01/14/20 17:44	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/09/20 15:30	01/14/20 17:44	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 17:44	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		01/09/20 15:30	01/14/20 17:44	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 17:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 17:44	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		01/09/20 15:30	01/14/20 17:44	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		01/09/20 15:30	01/14/20 17:44	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/09/20 15:30	01/14/20 17:44	1
Indene	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 17:44	1
Isophorone	ND		9.8	0.56	ug/L		01/09/20 15:30	01/14/20 17:44	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 17:44	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/09/20 15:30	01/14/20 17:44	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 17:44	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 17:44	1
4-Nitroaniline	ND		9.8	2.4	ug/L		01/09/20 15:30	01/14/20 17:44	1
Nitrobenzene	ND		9.8	0.54	ug/L		01/09/20 15:30	01/14/20 17:44	1
2-Nitrophenol	ND		9.8	0.64	ug/L		01/09/20 15:30	01/14/20 17:44	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/09/20 15:30	01/14/20 17:44	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 17:44	1

Client Sample ID: ROST4PZC-ROX-010720

Lab Sample ID: 400-182255-14

Date Collected: 01/07/20 13:35
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/09/20 15:30	01/14/20 17:44	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		01/09/20 15:30	01/14/20 17:44	1
Pentachlorophenol	ND		20	1.8	ug/L		01/09/20 15:30	01/14/20 17:44	1
Phenol	ND		9.8	2.6	ug/L		01/09/20 15:30	01/14/20 17:44	1
Pyridine	ND		9.8	3.1	ug/L		01/09/20 15:30	01/14/20 17:44	1
Quinoline	ND	U3	9.8	5.9	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/09/20 15:30	01/14/20 17:44	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*01/09/20 15:30*	*01/14/20 17:44*	*1*
2-Fluorophenol	*40*		*10 - 120*	*01/09/20 15:30*	*01/14/20 17:44*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*01/09/20 15:30*	*01/14/20 17:44*	*1*
Phenol-d5	*65*		*10 - 120*	*01/09/20 15:30*	*01/14/20 17:44*	*1*
Terphenyl-d14	*82*		*53 - 125*	*01/09/20 15:30*	*01/14/20 17:44*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*01/09/20 15:30*	*01/14/20 17:44*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.032	0.0059	ug/L		01/10/20 09:24	01/17/20 14:16	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		01/10/20 09:24	01/17/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*01/10/20 09:24*	*01/17/20 14:16*	*1*

Client Sample ID: ROST4PZE-ROX-010720
Date Collected: 01/07/20 14:15
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	47	J	50	20	ug/L			01/10/20 10:16	2
Acrolein	ND		40	20	ug/L			01/10/20 10:16	2
Acrylonitrile	ND		20	5.6	ug/L			01/10/20 10:16	2
Benzene	37		2.0	0.76	ug/L			01/10/20 10:16	2
Bromobenzene	ND		2.0	1.1	ug/L			01/10/20 10:16	2
Bromochloromethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Bromodichloromethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Bromoform	ND		10	1.4	ug/L			01/10/20 10:16	2
Bromomethane	ND	UJ	2.0	2.0	ug/L			01/10/20 10:16	2
2-Butanone (MEK)	34	J* J	50	5.2	ug/L			01/10/20 10:16	2
Carbon disulfide	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Carbon tetrachloride	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Chlorobenzene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Dibromochloromethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Chloroethane	ND		2.0	1.5	ug/L			01/10/20 10:16	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			01/10/20 10:16	2
Chloroform	ND		2.0	1.2	ug/L			01/10/20 10:16	2
1-Chlorohexane	ND	*	2.0	1.4	ug/L			01/10/20 10:16	2
Chloromethane	ND		2.0	1.7	ug/L			01/10/20 10:16	2
cis-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			01/10/20 10:16	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			01/10/20 10:16	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			01/10/20 10:16	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			01/10/20 10:16	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,2-Dichloroethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Ethylbenzene	190		2.0	1.0	ug/L			01/10/20 10:16	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			01/10/20 10:16	2
Hexachlorobutadiene	ND		10	1.8	ug/L			01/10/20 10:16	2
2-Hexanone	ND		50	6.2	ug/L			01/10/20 10:16	2
Isopropylbenzene	5.4		2.0	1.1	ug/L			01/10/20 10:16	2
Methylene bromide	ND		10	1.2	ug/L			01/10/20 10:16	2
Methylene Chloride	ND		10	6.0	ug/L			01/10/20 10:16	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			01/10/20 10:16	2
Methyl tert-butyl ether	ND		2.0	1.5	ug/L			01/10/20 10:16	2
m-Xylene & p-Xylene	290		10	3.2	ug/L			01/10/20 10:16	2
Naphthalene	120		2.0	2.0	ug/L			01/10/20 10:16	2
n-Butylbenzene	ND		2.0	1.5	ug/L			01/10/20 10:16	2
N-Propylbenzene	6.4		2.0	1.4	ug/L			01/10/20 10:16	2
o-Chlorotoluene	8.6		2.0	1.1	ug/L			01/10/20 10:16	2
o-Xylene	33		10	1.2	ug/L			01/10/20 10:16	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			01/10/20 10:16	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			01/10/20 10:16	2

Client Sample ID: ROST4PZE-ROX-010720
Date Collected: 01/07/20 14:15
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2.0	1.4	ug/L			01/10/20 10:16	2
Styrene	ND		2.0	2.0	ug/L			01/10/20 10:16	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			01/10/20 10:16	2
1,1,1,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Tetrachloroethene	ND		2.0	1.2	ug/L			01/10/20 10:16	2
Toluene	22		2.0	0.82	ug/L			01/10/20 10:16	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
trans-1,3-Dichloropropene	ND		10	1.0	ug/L			01/10/20 10:16	2
1,2,3-Trichlorobenzene	ND		2.0	1.4	ug/L			01/10/20 10:16	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			01/10/20 10:16	2
1,1,1-Trichloroethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,1,2-Trichloroethane	ND		10	1.0	ug/L			01/10/20 10:16	2
Trichloroethene	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			01/10/20 10:16	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			01/10/20 10:16	2
1,2,4-Trimethylbenzene	140		2.0	1.6	ug/L			01/10/20 10:16	2
1,3,5-Trimethylbenzene	24		2.0	1.1	ug/L			01/10/20 10:16	2
Vinyl acetate	ND		50	4.0	ug/L			01/10/20 10:16	2
Vinyl chloride	ND		2.0	1.0	ug/L			01/10/20 10:16	2
Xylenes, Total	320		20	3.2	ug/L			01/10/20 10:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*78 - 118*		*01/10/20 10:16*	*2*
Dibromofluoromethane	*105*		*81 - 121*		*01/10/20 10:16*	*2*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/10/20 10:16*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.7		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 15:05	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 15:05	1
Anthracene	ND		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 15:05	1
Benzo[a]anthracene	0.20		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Benzo[a]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Benzo[b]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Benzo[g,h,i]perylene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Chrysene	0.29		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Dibenz(a,h)anthracene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Fluoranthene	0.35		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 15:05	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.039	ug/L		01/09/20 15:30	01/14/20 15:05	1
Phenanthrene	11		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 15:05	1
Pyrene	1.3		0.20	0.020	ug/L		01/09/20 15:30	01/14/20 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*137*		*33 - 138*	*01/09/20 15:30*	*01/14/20 15:05*	*1*
2-Fluorobiphenyl	*81*		*15 - 122*	*01/09/20 15:30*	*01/14/20 15:05*	*1*
Nitrobenzene-d5	*51*		*19 - 130*	*01/09/20 15:30*	*01/14/20 15:05*	*1*

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: ROST4PZE-ROX-010720

Lab Sample ID: 400-182255-15

Date Collected: 01/07/20 14:15
Date Received: 01/08/20 08:56

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
1-Methylnaphthalene	74		2.0	0.20	ug/L		01/09/20 15:30	01/16/20 13:06	10
2-Methylnaphthalene	70		2.0	0.20	ug/L		01/09/20 15:30	01/16/20 13:06	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.1		0.20	0.021	ug/L		01/09/20 15:30	01/16/20 12:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/09/20 15:30	01/14/20 18:05	1
Benzenethiol	ND	UJ	9.8	1.7	ug/L		01/09/20 15:30	01/14/20 18:05	1
Benzoic acid	ND	UJ	29	7.1	ug/L		01/09/20 15:30	01/14/20 18:05	1
Benzyl alcohol	ND	UJ	9.8	2.0	ug/L		01/09/20 15:30	01/14/20 18:05	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 18:05	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		01/09/20 15:30	01/14/20 18:05	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		01/09/20 15:30	01/14/20 18:05	1
Bis(2-ethylhexyl) phthalate	8.1	J	9.8	4.9	ug/L		01/09/20 15:30	01/14/20 18:05	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		01/09/20 15:30	01/14/20 18:05	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		01/09/20 15:30	01/14/20 18:05	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/09/20 15:30	01/14/20 18:05	1
4-Chloro-3-methylphenol	ND	UJ	9.8	3.7	ug/L		01/09/20 15:30	01/14/20 18:05	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		01/09/20 15:30	01/14/20 18:05	1
2-Chlorophenol	ND	UJ	9.8	2.2	ug/L		01/09/20 15:30	01/14/20 18:05	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 18:05	1
Dibenz[a,h]acridine	ND	UJ	9.8	2.9	ug/L		01/09/20 15:30	01/14/20 18:05	1
Dibenzofuran	2.1	J	9.8	0.51	ug/L		01/09/20 15:30	01/14/20 18:05	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,4-Dichlorophenol	ND	UJ	9.8	2.9	ug/L		01/09/20 15:30	01/14/20 18:05	1
Diethyl phthalate	ND		9.8	0.69	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,4-Dimethylphenol	ND	UJ	9.8	3.4	ug/L		01/09/20 15:30	01/14/20 18:05	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		01/09/20 15:30	01/14/20 18:05	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/09/20 15:30	01/14/20 18:05	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,4-Dinitrophenol	ND	UJ	29	3.3	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/09/20 15:30	01/14/20 18:05	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		01/09/20 15:30	01/14/20 18:05	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 18:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/09/20 15:30	01/14/20 18:05	1
Hexachlorobenzene	ND		9.8	0.24	ug/L		01/09/20 15:30	01/14/20 18:05	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		01/09/20 15:30	01/14/20 18:05	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/09/20 15:30	01/14/20 18:05	1
Indene	~~4.0~~	J B U	9.8	0.98	ug/L		01/09/20 15:30	01/14/20 18:05	1
Isophorone	ND		9.8	0.56	ug/L		01/09/20 15:30	01/14/20 18:05	1
2-Methylphenol	ND	UJ	9.8	1.8	ug/L		01/09/20 15:30	01/14/20 18:05	1
3 & 4 Methylphenol	ND	UJ	20	1.0	ug/L		01/09/20 15:30	01/14/20 18:05	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/09/20 15:30	01/14/20 18:05	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/09/20 15:30	01/14/20 18:05	1
4-Nitroaniline	ND		9.8	2.4	ug/L		01/09/20 15:30	01/14/20 18:05	1

Client Sample Results

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

Job ID: 400-182255-1

Client Sample ID: ROST4PZE-ROX-010720

Lab Sample ID: 400-182255-15

Date Collected: 01/07/20 14:15
Date Received: 01/08/20 08:56

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		9.8	0.54	ug/L		01/09/20 15:30	01/14/20 18:05	1
2-Nitrophenol	ND	UJ	9.8	0.64	ug/L		01/09/20 15:30	01/14/20 18:05	1
4-Nitrophenol	ND	UJ	9.8	2.1	ug/L		01/09/20 15:30	01/14/20 18:05	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/09/20 15:30	01/14/20 18:05	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/09/20 15:30	01/14/20 18:05	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		01/09/20 15:30	01/14/20 18:05	1
Pentachlorophenol	ND	UJ	20	1.8	ug/L		01/09/20 15:30	01/14/20 18:05	1
Phenol	ND	UJ	9.8	2.5	ug/L		01/09/20 15:30	01/14/20 18:05	1
Pyridine	ND		9.8	3.1	ug/L		01/09/20 15:30	01/14/20 18:05	1
Quinoline	ND	UJ	9.8	5.9	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,4,5-Trichlorophenol	ND	UJ	9.8	3.6	ug/L		01/09/20 15:30	01/14/20 18:05	1
2,4,6-Trichlorophenol	ND	UJ	9.8	3.4	ug/L		01/09/20 15:30	01/14/20 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 120*	*01/09/20 15:30*	*01/14/20 18:05*	*1*
2-Fluorophenol	*0.2*	*X*	*10 - 120*	*01/09/20 15:30*	*01/14/20 18:05*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*01/09/20 15:30*	*01/14/20 18:05*	*1*
Phenol-d5	*0.8*	*X*	*10 - 120*	*01/09/20 15:30*	*01/14/20 18:05*	*1*
Terphenyl-d14	*88*		*53 - 125*	*01/09/20 15:30*	*01/14/20 18:05*	*1*
2,4,6-Tribromophenol	*17*		*15 - 135*	*01/09/20 15:30*	*01/14/20 18:05*	*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	*	0.038	0.0069	ug/L		01/10/20 09:24	01/17/20 14:37	1
1,2-Dibromoethane	ND		0.025	0.0063	ug/L		01/10/20 09:24	01/17/20 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*01/10/20 09:24*	*01/17/20 14:37*	*1*

Definitions/Glossary

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

Job ID: 400-182255-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery 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.
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 is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the 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: 400-182255-1

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)
400-182255-1	TB-ROX-010720-8260-A	82	105	115
400-182255-3	P54-ROX-010720-EB	86	104	109
400-182255-4	P54-ROX-010720	92	105	112
400-182255-4 MS	P54-ROX-010720	80	103	111
400-182255-4 MSD	P54-ROX-010720	87	103	99
400-182255-5	MW24-ROX-010720	85	107	111
400-182255-6	MW11-ROX-010720	84	106	114
400-182255-7	MW27-ROX-010720	83	107	116
400-182255-8	MW12-ROX-010720	86	107	107
400-182255-9	TB-ROX-010720-8260-B	83	105	113
400-182255-11	MW14-ROX-010720-EB	83	106	108
400-182255-12	MW14-ROX-010720	84	106	113
400-182255-13	P66-ROX-010720	85	103	113
400-182255-14	ROST4PZC-ROX-010720	87	104	115
400-182255-15	ROST4PZE-ROX-010720	87	105	105
LCS 400-473519/1002	Lab Control Sample	81	103	109
MB 400-473519/5	Method Blank	88	104	112

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)
400-182255-3	P54-ROX-010720-EB	69	44	80	69	93	77
400-182255-4	P54-ROX-010720	66	52	78	62	77	62
400-182255-5	MW24-ROX-010720	57	29	69	43	80	46
400-182255-5 - RE	MW24-ROX-010720	54	48	73	53	62	46
400-182255-6	MW11-ROX-010720	40	32	59	47	76	43
400-182255-7	MW27-ROX-010720	56	47	73	60	78	47
400-182255-8	MW12-ROX-010720	71	12	91	17	87	13 X
400-182255-11	MW14-ROX-010720-EB	51	43	63	54	57	45
400-182255-12	MW14-ROX-010720	72	49	85	70	85	74
400-182255-13	P66-ROX-010720	55	42	70	72	66	95
400-182255-14	ROST4PZC-ROX-010720	58	40	74	65	82	69
400-182255-15	ROST4PZE-ROX-010720	67	0.2 X	70	0.8 X	88	17
LCS 400-473324/2-A	Lab Control Sample	68	62	70	66	68	92
LCS 400-473324/30-A	Lab Control Sample	66	45	78	67	86	69
LCS 400-476444/2-A	Lab Control Sample	52	57	80	64	63	51
LCSD 400-473324/31-A	Lab Control Sample Dup	73	46	86	70	98	73
LCSD 400-473324/3-A	Lab Control Sample Dup	67	54	70	67	69	93
LCSD 400-476444/3-A	Lab Control Sample Dup	55	58	85	68	67	53
MB 400-473324/1-A	Method Blank	66	55	78	74	93	67
MB 400-476444/1-A	Method Blank	57	57	76	65	77	51

Surrogate Legend

Surrogate Summary

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

Job ID: 400-182255-1

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

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (33-138)	FBP (15-122)	NBZ (19-130)
400-182255-3	P54-ROX-010720-EB	102	108	97
400-182255-4	P54-ROX-010720	89	104	93
400-182255-5	MW24-ROX-010720	97	97	87
400-182255-6	MW11-ROX-010720	89	82	64
400-182255-7	MW27-ROX-010720	103	120	98
400-182255-8	MW12-ROX-010720	94	111	96
400-182255-11	MW14-ROX-010720-EB	71	95	80
400-182255-12	MW14-ROX-010720	101	120	106
400-182255-13	P66-ROX-010720	87	55	97
400-182255-14	ROST4PZC-ROX-010720	103	87	76
400-182255-15	ROST4PZE-ROX-010720	137	81	51
LCS 400-473324/2-A	Lab Control Sample	81	87	70
LCSD 400-473324/3-A	Lab Control Sample Dup	83	86	71
MB 400-473324/1-A	Method Blank	104	115	97

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB2 (51-149)
400-182255-2	TB-ROX-010720-8011-A	74
400-182255-3	P54-ROX-010720-EB	77
400-182255-4	P54-ROX-010720	75
400-182255-5	MW24-ROX-010720	131
400-182255-6	MW11-ROX-010720	102
400-182255-7	MW27-ROX-010720	123
400-182255-8	MW12-ROX-010720	113
400-182255-10	TB-ROX-010720-8011-B	126
400-182255-11	MW14-ROX-010720-EB	118
400-182255-12	MW14-ROX-010720	118
400-182255-13	P66-ROX-010720	102
400-182255-14	ROST4PZC-ROX-010720	113
400-182255-15	ROST4PZE-ROX-010720	118
LCS 400-473412/2-A	Lab Control Sample	93
LCS 400-473543/2-A	Lab Control Sample	126
LCSD 400-473412/3-A	Lab Control Sample Dup	70
LCSD 400-473543/3-A	Lab Control Sample Dup	124
MB 400-473412/1-A	Method Blank	89

Surrogate Summary

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

Job ID: 400-182255-1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**BFB2 (51-149)**
MB 400-473543/1-A	Method Blank	111

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-182255-1

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: 400-182255-1

Client Sample ID: TB-ROX-010720-8260-A

Lab Sample ID: 400-182255-1

Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

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	473519	01/10/20 13:00	RS	TAL PEN

Client Sample ID: TB-ROX-010720-8011-A

Lab Sample ID: 400-182255-2

Date Collected: 01/07/20 00:00
Date Received: 01/08/20 08:56

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			34.2 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 15:29	DS	TAL PEN

Client Sample ID: P54-ROX-010720-EB

Lab Sample ID: 400-182255-3

Date Collected: 01/07/20 08:15
Date Received: 01/08/20 08:56

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	473519	01/10/20 09:22	RS	TAL PEN
Total/NA	Prep	3520C			1041.2 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 14:31	VC1	TAL PEN
Total/NA	Prep	3520C			1041.2 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 12:05	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 16:42	DS	TAL PEN

Client Sample ID: P54-ROX-010720

Lab Sample ID: 400-182255-4

Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

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	473519	01/10/20 09:49	RS	TAL PEN
Total/NA	Prep	3520C	RA		1043.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D	RA	1			476181	01/31/20 13:21	VC1	TAL PEN
Total/NA	Prep	3520C			1043.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 14:53	VC1	TAL PEN
Total/NA	Prep	3520C			1043.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 12:23	PP1	TAL PEN
Total/NA	Prep	8011			34.1 mL	35 mL	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 17:02	DS	TAL PEN

Client Sample ID: MW24-ROX-010720

Lab Sample ID: 400-182255-5

Date Collected: 01/07/20 10:10
Date Received: 01/08/20 08:56

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	473519	01/10/20 14:22	RS	TAL PEN

Client Sample ID: MW24-ROX-010720

Lab Sample ID: 400-182255-5

Date Collected: 01/07/20 10:10
Date Received: 01/08/20 08:56

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	RA2		1045.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D	RA2	1			476857	02/06/20 14:15	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1041.4 mL	1 mL	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			476960	02/07/20 01:10	VC1	TAL PEN
Total/NA	Prep	3520C			1045.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 15:14	VC1	TAL PEN
Total/NA	Prep	3520C			1045.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 12:41	PP1	TAL PEN
Total/NA	Prep	8011			32.2 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 11:14	DS	TAL PEN

Client Sample ID: MW11-ROX-010720

Lab Sample ID: 400-182255-6

Date Collected: 01/07/20 10:55
Date Received: 01/08/20 08:56

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	473519	01/10/20 14:49	RS	TAL PEN
Total/NA	Prep	3520C			1020.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 15:33	VC1	TAL PEN
Total/NA	Prep	3520C			1020.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 12:59	PP1	TAL PEN
Total/NA	Prep	8011			32.5 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 11:35	DS	TAL PEN

Client Sample ID: MW27-ROX-010720

Lab Sample ID: 400-182255-7

Date Collected: 01/07/20 11:55
Date Received: 01/08/20 08:56

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	473519	01/10/20 15:16	RS	TAL PEN
Total/NA	Prep	3520C			1033.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 15:57	VC1	TAL PEN
Total/NA	Prep	3520C			1033.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 13:17	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 11:55	DS	TAL PEN

Client Sample ID: MW12-ROX-010720

Lab Sample ID: 400-182255-8

Date Collected: 01/07/20 13:40
Date Received: 01/08/20 08:56

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	473519	01/10/20 15:43	RS	TAL PEN
Total/NA	Prep	3520C			1036.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 16:18	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-182255-1

Client Sample ID: MW12-ROX-010720

Lab Sample ID: 400-182255-8
Matrix: Water

Date Collected: 01/07/20 13:40
Date Received: 01/08/20 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	3520C			1036.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 13:35	PP1	TAL PEN
Total/NA	Prep	8011			28.9 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 12:15	DS	TAL PEN

Client Sample ID: TB-ROX-010720-8260-B

Lab Sample ID: 400-182255-9
Matrix: Water

Date Collected: 01/07/20 00:00
Date Received: 01/08/20 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	473519	01/10/20 13:28	RS	TAL PEN

Client Sample ID: TB-ROX-010720-8011-B

Lab Sample ID: 400-182255-10
Matrix: Water

Date Collected: 01/07/20 00:00
Date Received: 01/08/20 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			35.4 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 12:35	DS	TAL PEN

Client Sample ID: MW14-ROX-010720-EB

Lab Sample ID: 400-182255-11
Matrix: Water

Date Collected: 01/07/20 08:40
Date Received: 01/08/20 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	473519	01/10/20 13:55	RS	TAL PEN
Total/NA	Prep	3520C			1020 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 16:40	VC1	TAL PEN
Total/NA	Prep	3520C			1020 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 13:53	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 12:55	DS	TAL PEN

Client Sample ID: MW14-ROX-010720

Lab Sample ID: 400-182255-12
Matrix: Water

Date Collected: 01/07/20 10:50
Date Received: 01/08/20 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	473519	01/10/20 16:10	RS	TAL PEN
Total/NA	Prep	3520C	RA		1031.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D	RA	1			476181	01/31/20 14:09	VC1	TAL PEN
Total/NA	Prep	3520C			1031.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 17:01	VC1	TAL PEN
Total/NA	Prep	3520C			1031.6 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 14:11	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-182255-1

Client Sample ID: MW14-ROX-010720

Lab Sample ID: 400-182255-12
Matrix: Water

Date Collected: 01/07/20 10:50
Date Received: 01/08/20 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			33.7 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 13:15	DS	TAL PEN

Client Sample ID: P66-ROX-010720

Lab Sample ID: 400-182255-13
Matrix: Water

Date Collected: 01/07/20 11:25
Date Received: 01/08/20 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	473519	01/10/20 16:37	RS	TAL PEN
Total/NA	Prep	3520C			1030.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		5			473903	01/14/20 17:23	VC1	TAL PEN
Total/NA	Prep	3520C			1030.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 14:29	PP1	TAL PEN
Total/NA	Prep	3520C	DL		1030.8 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	10			474274	01/16/20 11:51	PP1	TAL PEN
Total/NA	Prep	8011			33.1 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 13:56	DS	TAL PEN

Client Sample ID: ROST4PZC-ROX-010720

Lab Sample ID: 400-182255-14
Matrix: Water

Date Collected: 01/07/20 13:35
Date Received: 01/08/20 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	473519	01/10/20 17:04	RS	TAL PEN
Total/NA	Prep	3520C			1019.2 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 17:44	VC1	TAL PEN
Total/NA	Prep	3520C			1019.2 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 14:47	PP1	TAL PEN
Total/NA	Prep	3520C	DL		1019.2 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			474274	01/16/20 12:28	PP1	TAL PEN
Total/NA	Prep	8011			32.8 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 14:16	DS	TAL PEN

Client Sample ID: ROST4PZE-ROX-010720

Lab Sample ID: 400-182255-15
Matrix: Water

Date Collected: 01/07/20 14:15
Date Received: 01/08/20 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		2	5 mL	5 mL	473519	01/10/20 10:16	RS	TAL PEN
Total/NA	Prep	3520C			1021.4 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 18:05	VC1	TAL PEN
Total/NA	Prep	3520C			1021.4 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 15:05	PP1	TAL PEN
Total/NA	Prep	3520C	RA		1021.4 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			474274	01/16/20 12:47	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-182255-1

Client Sample ID: ROST4PZE-ROX-010720

Lab Sample ID: 400-182255-15

Date Collected: 01/07/20 14:15
Date Received: 01/08/20 08:56

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		1021.4 mL	1 mL	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	10			474274	01/16/20 13:06	PP1	TAL PEN
Total/NA	Prep	8011			27.7 mL	35 mL	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 14:37	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473324/1-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	473324	01/08/20 15:43	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 13:27	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473324	01/08/20 15:43	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			473920	01/14/20 11:11	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473412/1-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	473412	01/09/20 09:56	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 13:45	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473519/5

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	473519	01/10/20 08:56	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473543/1-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	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 07:43	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-476444/1-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/06/20 23:53	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473324/2-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	473324	01/08/20 15:43	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473752	01/13/20 12:23	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473324	01/08/20 15:43	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			473920	01/14/20 11:29	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473324/30-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	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 13:49	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473412/2-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	473412	01/09/20 09:56	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 14:06	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473519/1002

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	473519	01/10/20 07:56	RS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473543/2-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	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 09:15	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-476444/2-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/07/20 00:19	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-473324/31-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	473324	01/09/20 15:30	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473903	01/14/20 14:10	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-473324/3-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	473324	01/08/20 15:43	CGM	TAL PEN
Total/NA	Analysis	8270D		1			473752	01/13/20 12:44	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473324	01/08/20 15:43	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			473920	01/14/20 11:47	PP1	TAL PEN

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

Lab Sample ID: LCSD 400-473412/3-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	473412	01/09/20 09:57	SBC	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 14:26	DS	TAL PEN

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

Lab Sample ID: LCSD 400-473543/3-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	473543	01/10/20 09:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			474311	01/17/20 09:35	DS	TAL PEN

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

Lab Sample ID: LCSD 400-476444/3-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/07/20 00:44	VC1	TAL PEN

Client Sample ID: P54-ROX-010720
Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-4 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473519	01/10/20 10:43	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-182255-1

Client Sample ID: P54-ROX-010720
Date Collected: 01/07/20 09:20
Date Received: 01/08/20 08:56

Lab Sample ID: 400-182255-4 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473519	01/10/20 11:10	RS	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: 400-182255-1

GC/MS VOA

Analysis Batch: 473519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-1	TB-ROX-010720-8260-A	Total/NA	Water	8260B	
400-182255-3	P54-ROX-010720-EB	Total/NA	Water	8260B	
400-182255-4	P54-ROX-010720	Total/NA	Water	8260B	
400-182255-5	MW24-ROX-010720	Total/NA	Water	8260B	
400-182255-6	MW11-ROX-010720	Total/NA	Water	8260B	
400-182255-7	MW27-ROX-010720	Total/NA	Water	8260B	
400-182255-8	MW12-ROX-010720	Total/NA	Water	8260B	
400-182255-9	TB-ROX-010720-8260-B	Total/NA	Water	8260B	
400-182255-11	MW14-ROX-010720-EB	Total/NA	Water	8260B	
400-182255-12	MW14-ROX-010720	Total/NA	Water	8260B	
400-182255-13	P66-ROX-010720	Total/NA	Water	8260B	
400-182255-14	ROST4PZC-ROX-010720	Total/NA	Water	8260B	
400-182255-15	ROST4PZE-ROX-010720	Total/NA	Water	8260B	
MB 400-473519/5	Method Blank	Total/NA	Water	8260B	
LCS 400-473519/1002	Lab Control Sample	Total/NA	Water	8260B	
400-182255-4 MS	P54-ROX-010720	Total/NA	Water	8260B	
400-182255-4 MSD	P54-ROX-010720	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 473324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-3	P54-ROX-010720-EB	Total/NA	Water	3520C	
400-182255-4	P54-ROX-010720	Total/NA	Water	3520C	
400-182255-4 - RA	P54-ROX-010720	Total/NA	Water	3520C	
400-182255-5	MW24-ROX-010720	Total/NA	Water	3520C	
400-182255-5 - RA2	MW24-ROX-010720	Total/NA	Water	3520C	
400-182255-6	MW11-ROX-010720	Total/NA	Water	3520C	
400-182255-7	MW27-ROX-010720	Total/NA	Water	3520C	
400-182255-8	MW12-ROX-010720	Total/NA	Water	3520C	
400-182255-11	MW14-ROX-010720-EB	Total/NA	Water	3520C	
400-182255-12	MW14-ROX-010720	Total/NA	Water	3520C	
400-182255-12 - RA	MW14-ROX-010720	Total/NA	Water	3520C	
400-182255-13	P66-ROX-010720	Total/NA	Water	3520C	
400-182255-13 - DL	P66-ROX-010720	Total/NA	Water	3520C	
400-182255-14	ROST4PZC-ROX-010720	Total/NA	Water	3520C	
400-182255-14 - DL	ROST4PZC-ROX-010720	Total/NA	Water	3520C	
400-182255-15	ROST4PZE-ROX-010720	Total/NA	Water	3520C	
400-182255-15 - DL	ROST4PZE-ROX-010720	Total/NA	Water	3520C	
400-182255-15 - RA	ROST4PZE-ROX-010720	Total/NA	Water	3520C	
MB 400-473324/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-473324/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-473324/30-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-473324/31-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-473324/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 473752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-473324/2-A	Lab Control Sample	Total/NA	Water	8270D	473324
LCSD 400-473324/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	473324

QC Association Summary

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

Job ID: 400-182255-1

GC/MS Semi VOA

Analysis Batch: 473903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-3	P54-ROX-010720-EB	Total/NA	Water	8270D	473324
400-182255-4	P54-ROX-010720	Total/NA	Water	8270D	473324
400-182255-5	MW24-ROX-010720	Total/NA	Water	8270D	473324
400-182255-6	MW11-ROX-010720	Total/NA	Water	8270D	473324
400-182255-7	MW27-ROX-010720	Total/NA	Water	8270D	473324
400-182255-8	MW12-ROX-010720	Total/NA	Water	8270D	473324
400-182255-11	MW14-ROX-010720-EB	Total/NA	Water	8270D	473324
400-182255-12	MW14-ROX-010720	Total/NA	Water	8270D	473324
400-182255-13	P66-ROX-010720	Total/NA	Water	8270D	473324
400-182255-14	ROST4PZC-ROX-010720	Total/NA	Water	8270D	473324
400-182255-15	ROST4PZE-ROX-010720	Total/NA	Water	8270D	473324
MB 400-473324/1-A	Method Blank	Total/NA	Water	8270D	473324
LCS 400-473324/30-A	Lab Control Sample	Total/NA	Water	8270D	473324
LCSD 400-473324/31-A	Lab Control Sample Dup	Total/NA	Water	8270D	473324

Analysis Batch: 473920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-3	P54-ROX-010720-EB	Total/NA	Water	8270D LL	473324
400-182255-4	P54-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-5	MW24-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-6	MW11-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-7	MW27-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-8	MW12-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-11	MW14-ROX-010720-EB	Total/NA	Water	8270D LL	473324
400-182255-12	MW14-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-13	P66-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-14	ROST4PZC-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-15	ROST4PZE-ROX-010720	Total/NA	Water	8270D LL	473324
MB 400-473324/1-A	Method Blank	Total/NA	Water	8270D LL	473324
LCS 400-473324/2-A	Lab Control Sample	Total/NA	Water	8270D LL	473324
LCSD 400-473324/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	473324

Analysis Batch: 474274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-13 - DL	P66-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-14 - DL	ROST4PZC-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-15 - RA	ROST4PZE-ROX-010720	Total/NA	Water	8270D LL	473324
400-182255-15 - DL	ROST4PZE-ROX-010720	Total/NA	Water	8270D LL	473324

Analysis Batch: 476181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-4 - RA	P54-ROX-010720	Total/NA	Water	8270D	473324
400-182255-12 - RA	MW14-ROX-010720	Total/NA	Water	8270D	473324

Prep Batch: 476444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-5 - RE	MW24-ROX-010720	Total/NA	Water	3520C	
MB 400-476444/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

QC Association Summary

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

Job ID: 400-182255-1

GC/MS Semi VOA

Analysis Batch: 476857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-5 - RA2	MW24-ROX-010720	Total/NA	Water	8270D	473324

Analysis Batch: 476960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-5 - RE	MW24-ROX-010720	Total/NA	Water	8270D	476444
MB 400-476444/1-A	Method Blank	Total/NA	Water	8270D	476444
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	8270D	476444
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	476444

GC Semi VOA

Prep Batch: 473412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-2	TB-ROX-010720-8011-A	Total/NA	Water	8011	
400-182255-3	P54-ROX-010720-EB	Total/NA	Water	8011	
400-182255-4	P54-ROX-010720	Total/NA	Water	8011	
MB 400-473412/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473412/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473412/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Prep Batch: 473543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-5	MW24-ROX-010720	Total/NA	Water	8011	
400-182255-6	MW11-ROX-010720	Total/NA	Water	8011	
400-182255-7	MW27-ROX-010720	Total/NA	Water	8011	
400-182255-8	MW12-ROX-010720	Total/NA	Water	8011	
400-182255-10	TB-ROX-010720-8011-B	Total/NA	Water	8011	
400-182255-11	MW14-ROX-010720-EB	Total/NA	Water	8011	
400-182255-12	MW14-ROX-010720	Total/NA	Water	8011	
400-182255-13	P66-ROX-010720	Total/NA	Water	8011	
400-182255-14	ROST4PZC-ROX-010720	Total/NA	Water	8011	
400-182255-15	ROST4PZE-ROX-010720	Total/NA	Water	8011	
MB 400-473543/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473543/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473543/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 473595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-2	TB-ROX-010720-8011-A	Total/NA	Water	8011	473412
400-182255-3	P54-ROX-010720-EB	Total/NA	Water	8011	473412
400-182255-4	P54-ROX-010720	Total/NA	Water	8011	473412
MB 400-473412/1-A	Method Blank	Total/NA	Water	8011	473412
LCS 400-473412/2-A	Lab Control Sample	Total/NA	Water	8011	473412
LCSD 400-473412/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473412

Analysis Batch: 474311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-5	MW24-ROX-010720	Total/NA	Water	8011	473543
400-182255-6	MW11-ROX-010720	Total/NA	Water	8011	473543
400-182255-7	MW27-ROX-010720	Total/NA	Water	8011	473543
400-182255-8	MW12-ROX-010720	Total/NA	Water	8011	473543

GC Semi VOA (Continued)

Analysis Batch: 474311 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182255-10	TB-ROX-010720-8011-B	Total/NA	Water	8011	473543
400-182255-11	MW14-ROX-010720-EB	Total/NA	Water	8011	473543
400-182255-12	MW14-ROX-010720	Total/NA	Water	8011	473543
400-182255-13	P66-ROX-010720	Total/NA	Water	8011	473543
400-182255-14	ROST4PZC-ROX-010720	Total/NA	Water	8011	473543
400-182255-15	ROST4PZE-ROX-010720	Total/NA	Water	8011	473543
MB 400-473543/1-A	Method Blank	Total/NA	Water	8011	473543
LCS 400-473543/2-A	Lab Control Sample	Total/NA	Water	8011	473543
LCSD 400-473543/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473543

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

Lab Sample ID: MB 400-473519/5
Matrix: Water
Analysis Batch: 473519

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/20 08:56	1
Acrolein	ND		20	10	ug/L			01/10/20 08:56	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/20 08:56	1
Benzene	ND		1.0	0.38	ug/L			01/10/20 08:56	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/20 08:56	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/10/20 08:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Bromoform	ND		5.0	0.71	ug/L			01/10/20 08:56	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/20 08:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/20 08:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/20 08:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/20 08:56	1
Chloroform	ND		1.0	0.60	ug/L			01/10/20 08:56	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/10/20 08:56	1
Chloromethane	ND		1.0	0.83	ug/L			01/10/20 08:56	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 08:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/20 08:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/20 08:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/20 08:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/20 08:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/20 08:56	1
2-Hexanone	ND		25	3.1	ug/L			01/10/20 08:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/20 08:56	1
Methylene bromide	ND		5.0	0.59	ug/L			01/10/20 08:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/20 08:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/20 08:56	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/10/20 08:56	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/10/20 08:56	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/20 08:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/20 08:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/20 08:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/20 08:56	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/20 08:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/20 08:56	1

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

Lab Sample ID: MB 400-473519/5
Matrix: Water
Analysis Batch: 473519

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/20 08:56	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/20 08:56	1
Styrene	ND		1.0	1.0	ug/L			01/10/20 08:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/20 08:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/10/20 08:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/10/20 08:56	1
Toluene	ND		1.0	0.41	ug/L			01/10/20 08:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/20 08:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/10/20 08:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/20 08:56	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/10/20 08:56	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/10/20 08:56	1
Trichloroethene	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/20 08:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/20 08:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/20 08:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/20 08:56	1
Vinyl acetate	ND		25	2.0	ug/L			01/10/20 08:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/20 08:56	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/20 08:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*78 - 118*		*01/10/20 08:56*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/10/20 08:56*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*01/10/20 08:56*	*1*

Lab Sample ID: LCS 400-473519/1002
Matrix: Water
Analysis Batch: 473519

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	105		ug/L		53	43 - 160
Acrolein	500	346		ug/L		69	38 - 160
Acrylonitrile	500	589		ug/L		118	64 - 142
Benzene	50.0	49.1		ug/L		98	70 - 130
Bromobenzene	50.0	43.7		ug/L		87	70 - 132
Bromochloromethane	50.0	53.4		ug/L		107	70 - 130
Bromodichloromethane	50.0	54.3		ug/L		109	67 - 133
Bromoform	50.0	46.5		ug/L		93	57 - 140
Bromomethane	50.0	24.6		ug/L		49	10 - 160
2-Butanone (MEK)	200	120	*	ug/L		60	61 - 145
Carbon disulfide	50.0	47.7		ug/L		95	61 - 137
Carbon tetrachloride	50.0	55.4		ug/L		111	61 - 137
Chlorobenzene	50.0	49.8		ug/L		100	70 - 130
Dibromochloromethane	50.0	58.1		ug/L		116	67 - 135
Chloroethane	50.0	38.8		ug/L		78	55 - 141

QC Sample Results

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

Job ID: 400-182255-1

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

Lab Sample ID: LCS 400-473519/1002
Matrix: Water
Analysis Batch: 473519

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	43.2		ug/L		86	10 - 160
Chloroform	50.0	50.2		ug/L		100	69 - 130
1-Chlorohexane	50.0	67.3	*	ug/L		135	69 - 130
Chloromethane	50.0	44.5		ug/L		89	58 - 137
cis-1,2-Dichloroethene	50.0	57.1		ug/L		114	68 - 130
cis-1,3-Dichloropropene	50.0	53.9		ug/L		108	69 - 132
1,2-Dichlorobenzene	50.0	52.5		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	32.4		ug/L		65	41 - 146
1,1-Dichloroethane	50.0	55.4		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	58.9		ug/L		118	69 - 130
1,1-Dichloroethene	50.0	47.2		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	58.9		ug/L		118	70 - 130
1,3-Dichloropropane	50.0	54.9		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	51.3		ug/L		103	52 - 135
1,1-Dichloropropene	50.0	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	50.8		ug/L		102	70 - 130
Ethyl methacrylate	50.0	56.1		ug/L		112	68 - 130
Hexachlorobutadiene	50.0	56.2		ug/L		112	53 - 140
2-Hexanone	200	190		ug/L		95	65 - 137
Isopropylbenzene	50.0	52.5		ug/L		105	70 - 130
Methylene bromide	50.0	49.6		ug/L		99	70 - 130
Methylene Chloride	50.0	50.4		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	245		ug/L		122	69 - 138
Methyl tert-butyl ether	50.0	47.7		ug/L		95	66 - 130
m-Xylene & p-Xylene	50.0	50.5		ug/L		101	70 - 130
Naphthalene	50.0	49.0		ug/L		98	47 - 149
n-Butylbenzene	50.0	54.1		ug/L		108	67 - 130
N-Propylbenzene	50.0	45.6		ug/L		91	70 - 130
o-Chlorotoluene	50.0	43.3		ug/L		87	70 - 130
o-Xylene	50.0	52.0		ug/L		104	70 - 130
p-Chlorotoluene	50.0	43.4		ug/L		87	70 - 130
p-Isopropyltoluene	50.0	52.8		ug/L		106	65 - 130
sec-Butylbenzene	50.0	47.2		ug/L		94	66 - 130
Styrene	50.0	53.0		ug/L		106	70 - 130
tert-Butylbenzene	50.0	47.3		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.8		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.4		ug/L		89	70 - 131
Tetrachloroethene	50.0	52.5		ug/L		105	65 - 130
Toluene	50.0	54.3		ug/L		109	70 - 130
trans-1,2-Dichloroethene	50.0	44.9		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	57.7		ug/L		115	63 - 130
1,2,3-Trichlorobenzene	50.0	54.6		ug/L		109	60 - 138
1,2,4-Trichlorobenzene	50.0	49.4		ug/L		99	60 - 140
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	68 - 130
1,1,2-Trichloroethane	50.0	52.9		ug/L		106	70 - 130
Trichloroethene	50.0	50.6		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	37.5		ug/L		75	65 - 138

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

Lab Sample ID: LCS 400-473519/1002
Matrix: Water
Analysis Batch: 473519

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	43.9		ug/L		88	70 - 130
1,2,4-Trimethylbenzene	50.0	47.5		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	50.0	45.0		ug/L		90	69 - 130
Vinyl acetate	100	71.1		ug/L		71	26 - 160
Vinyl chloride	50.0	44.7		ug/L		89	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: 400-182255-4 MS
Matrix: Water
Analysis Batch: 473519

Client Sample ID: P54-ROX-010720
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	89.5		ug/L		45	43 - 150
Acrolein	ND		500	389		ug/L		78	38 - 150
Acrylonitrile	ND		500	561		ug/L		112	62 - 149
Benzene	ND		50.0	45.3		ug/L		91	56 - 142
Bromobenzene	ND		50.0	38.1		ug/L		76	59 - 136
Bromochloromethane	ND		50.0	50.4		ug/L		101	64 - 140
Bromodichloromethane	ND		50.0	51.1		ug/L		102	59 - 143
Bromoform	ND		50.0	41.1		ug/L		82	50 - 140
Bromomethane	ND		50.0	29.3		ug/L		59	10 - 150
2-Butanone (MEK)	ND	F1 *	200	111		ug/L		55	55 - 150
Carbon disulfide	ND		50.0	44.5		ug/L		89	48 - 150
Carbon tetrachloride	ND		50.0	52.2		ug/L		104	55 - 145
Chlorobenzene	ND		50.0	44.7		ug/L		89	64 - 130
Dibromochloromethane	ND		50.0	53.7		ug/L		107	56 - 143
Chloroethane	ND		50.0	42.3		ug/L		85	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	49.4		ug/L		99	60 - 141
1-Chlorohexane	ND	*	50.0	55.7		ug/L		111	56 - 136
Chloromethane	ND		50.0	53.0		ug/L		106	49 - 148
cis-1,2-Dichloroethene	ND		50.0	53.9		ug/L		108	59 - 143
cis-1,3-Dichloropropene	ND		50.0	48.8		ug/L		98	57 - 140
1,2-Dichlorobenzene	ND		50.0	44.6		ug/L		89	52 - 137
1,3-Dichlorobenzene	ND		50.0	44.1		ug/L		88	54 - 135
1,4-Dichlorobenzene	ND		50.0	42.8		ug/L		86	53 - 135
Dichlorodifluoromethane	ND		50.0	34.7		ug/L		69	16 - 150
1,1-Dichloroethane	ND		50.0	54.1		ug/L		108	61 - 144
1,2-Dichloroethane	ND		50.0	56.2		ug/L		112	60 - 141
1,1-Dichloroethene	ND		50.0	42.2		ug/L		84	54 - 147
1,2-Dichloropropane	ND		50.0	54.8		ug/L		110	66 - 137
1,3-Dichloropropane	ND		50.0	52.1		ug/L		104	66 - 133
2,2-Dichloropropane	ND		50.0	47.0		ug/L		94	42 - 144

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

Lab Sample ID: 400-182255-4 MS
Matrix: Water
Analysis Batch: 473519

Client Sample ID: P54-ROX-010720
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	46.7		ug/L		93	65 - 136
Ethylbenzene	ND		50.0	44.5		ug/L		89	58 - 131
Ethyl methacrylate	ND		50.0	53.8		ug/L		108	64 - 130
Hexachlorobutadiene	ND		50.0	40.3		ug/L		81	31 - 149
2-Hexanone	ND		200	174		ug/L		87	65 - 140
Isopropylbenzene	ND		50.0	44.7		ug/L		89	56 - 133
Methylene bromide	ND		50.0	47.2		ug/L		94	63 - 138
Methylene Chloride	ND		50.0	47.6		ug/L		95	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	224		ug/L		112	63 - 146
Methyl tert-butyl ether	ND		50.0	47.1		ug/L		94	59 - 137
m-Xylene & p-Xylene	ND		50.0	43.7		ug/L		87	57 - 130
Naphthalene	ND		50.0	44.0		ug/L		88	25 - 150
n-Butylbenzene	ND		50.0	40.0		ug/L		80	41 - 142
N-Propylbenzene	ND		50.0	36.0		ug/L		72	51 - 138
o-Chlorotoluene	ND		50.0	36.6		ug/L		73	53 - 134
o-Xylene	ND		50.0	45.0		ug/L		90	61 - 130
p-Chlorotoluene	ND		50.0	36.9		ug/L		74	54 - 133
p-Isopropyltoluene	ND		50.0	41.5		ug/L		83	48 - 139
sec-Butylbenzene	ND		50.0	39.0		ug/L		78	50 - 138
Styrene	ND		50.0	47.3		ug/L		95	58 - 131
tert-Butylbenzene	ND		50.0	39.6		ug/L		79	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	50.9		ug/L		102	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	42.3		ug/L		85	66 - 135
Tetrachloroethene	ND		50.0	44.8		ug/L		90	52 - 133
Toluene	ND		50.0	47.9		ug/L		96	65 - 130
trans-1,2-Dichloroethene	ND		50.0	41.5		ug/L		83	61 - 143
trans-1,3-Dichloropropene	ND		50.0	54.3		ug/L		109	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	44.9		ug/L		90	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	41.4		ug/L		83	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.7		ug/L		93	57 - 142
1,1,2-Trichloroethane	ND		50.0	50.1		ug/L		100	66 - 131
Trichloroethene	ND		50.0	46.2		ug/L		92	64 - 136
Trichlorofluoromethane	ND		50.0	40.8		ug/L		82	54 - 150
1,2,3-Trichloropropane	ND		50.0	41.7		ug/L		83	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	42.2		ug/L		84	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	37.1		ug/L		74	52 - 135
Vinyl acetate	ND		100	82.3		ug/L		82	26 - 150
Vinyl chloride	ND		50.0	49.0		ug/L		98	46 - 150
Xylenes, Total	ND		100	88.7		ug/L		89	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*111*		*80 - 120*

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

Lab Sample ID: 400-182255-4 MSD
Matrix: Water
Analysis Batch: 473519

Client Sample ID: P54-ROX-010720
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	87.1		ug/L		44	43 - 150	3	30
Acrolein	ND		500	372		ug/L		74	38 - 150	4	31
Acrylonitrile	ND		500	554		ug/L		111	62 - 149	1	30
Benzene	ND		50.0	44.8		ug/L		90	56 - 142	1	30
Bromobenzene	ND		50.0	43.2		ug/L		86	59 - 136	13	30
Bromochloromethane	ND		50.0	49.2		ug/L		98	64 - 140	2	30
Bromodichloromethane	ND		50.0	50.9		ug/L		102	59 - 143	0	30
Bromoform	ND		50.0	45.5		ug/L		91	50 - 140	10	30
Bromomethane	ND		50.0	34.9		ug/L		70	10 - 150	18	50
2-Butanone (MEK)	ND	F1 *	200	105	F1	ug/L		52	55 - 150	6	30
Carbon disulfide	ND		50.0	44.1		ug/L		88	48 - 150	1	30
Carbon tetrachloride	ND		50.0	50.0		ug/L		100	55 - 145	4	30
Chlorobenzene	ND		50.0	44.9		ug/L		90	64 - 130	0	30
Dibromochloromethane	ND		50.0	52.1		ug/L		104	56 - 143	3	30
Chloroethane	ND		50.0	43.2		ug/L		86	50 - 150	2	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	48.6		ug/L		97	60 - 141	2	30
1-Chlorohexane	ND	*	50.0	53.5		ug/L		107	56 - 136	4	30
Chloromethane	ND		50.0	56.3		ug/L		113	49 - 148	6	31
cis-1,2-Dichloroethene	ND		50.0	53.9		ug/L		108	59 - 143	0	30
cis-1,3-Dichloropropene	ND		50.0	50.4		ug/L		101	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	45.3		ug/L		91	52 - 137	1	30
1,3-Dichlorobenzene	ND		50.0	45.5		ug/L		91	54 - 135	3	30
1,4-Dichlorobenzene	ND		50.0	43.0		ug/L		86	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	35.2		ug/L		70	16 - 150	1	31
1,1-Dichloroethane	ND		50.0	52.3		ug/L		105	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	55.7		ug/L		111	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	43.3		ug/L		87	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	54.5		ug/L		109	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	49.5		ug/L		99	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	47.6		ug/L		95	42 - 144	1	31
1,1-Dichloropropene	ND		50.0	46.3		ug/L		93	65 - 136	1	30
Ethylbenzene	ND		50.0	43.7		ug/L		87	58 - 131	2	30
Ethyl methacrylate	ND		50.0	47.5		ug/L		95	64 - 130	13	30
Hexachlorobutadiene	ND		50.0	39.7		ug/L		79	31 - 149	2	36
2-Hexanone	ND		200	163		ug/L		82	65 - 140	6	30
Isopropylbenzene	ND		50.0	42.4		ug/L		85	56 - 133	5	30
Methylene bromide	ND		50.0	48.2		ug/L		96	63 - 138	2	30
Methylene Chloride	ND		50.0	48.5		ug/L		97	60 - 146	2	32
4-Methyl-2-pentanone (MIBK)	ND		200	220		ug/L		110	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	46.9		ug/L		94	59 - 137	0	30
m-Xylene & p-Xylene	ND		50.0	41.4		ug/L		83	57 - 130	5	30
Naphthalene	ND		50.0	43.5		ug/L		87	25 - 150	1	30
n-Butylbenzene	ND		50.0	39.3		ug/L		79	41 - 142	2	31
N-Propylbenzene	ND		50.0	40.4		ug/L		81	51 - 138	11	30
o-Chlorotoluene	ND		50.0	40.5		ug/L		81	53 - 134	10	30
o-Xylene	ND		50.0	43.6		ug/L		87	61 - 130	3	30
p-Chlorotoluene	ND		50.0	39.5		ug/L		79	54 - 133	7	30

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

Lab Sample ID: 400-182255-4 MSD
Matrix: Water
Analysis Batch: 473519

Client Sample ID: P54-ROX-010720
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	41.9		ug/L		84	48 - 139	1	30
sec-Butylbenzene	ND		50.0	40.4		ug/L		81	50 - 138	3	30
Styrene	ND		50.0	45.9		ug/L		92	58 - 131	3	30
tert-Butylbenzene	ND		50.0	41.0		ug/L		82	54 - 146	3	30
1,1,1,2-Tetrachloroethane	ND		50.0	50.4		ug/L		101	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	45.7		ug/L		91	66 - 135	8	30
Tetrachloroethene	ND		50.0	41.5		ug/L		83	52 - 133	8	30
Toluene	ND		50.0	44.0		ug/L		88	65 - 130	9	30
trans-1,2-Dichloroethene	ND		50.0	42.3		ug/L		85	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	47.9		ug/L		96	53 - 133	13	30
1,2,3-Trichlorobenzene	ND		50.0	44.9		ug/L		90	43 - 145	0	30
1,2,4-Trichlorobenzene	ND		50.0	42.4		ug/L		85	39 - 148	2	30
1,1,1-Trichloroethane	ND		50.0	46.2		ug/L		92	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	44.3		ug/L		89	66 - 131	12	30
Trichloroethene	ND		50.0	45.4		ug/L		91	64 - 136	2	30
Trichlorofluoromethane	ND		50.0	40.3		ug/L		81	54 - 150	1	30
1,2,3-Trichloropropane	ND		50.0	44.2		ug/L		88	65 - 133	6	30
1,2,4-Trimethylbenzene	ND		50.0	43.4		ug/L		87	50 - 139	3	30
1,3,5-Trimethylbenzene	ND		50.0	40.8		ug/L		82	52 - 135	9	30
Vinyl acetate	ND		100	74.3		ug/L		74	26 - 150	10	33
Vinyl chloride	ND		50.0	48.5		ug/L		97	46 - 150	1	30
Xylenes, Total	ND		100	84.9		ug/L		85	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: MB 400-473324/1-A
Matrix: Water
Analysis Batch: 473903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/08/20 15:43	01/14/20 13:27	1
Benzenethiol	ND		10	1.7	ug/L		01/08/20 15:43	01/14/20 13:27	1
Benzoic acid	ND		30	7.3	ug/L		01/08/20 15:43	01/14/20 13:27	1
Benzyl alcohol	ND		10	2.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/08/20 15:43	01/14/20 13:27	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/08/20 15:43	01/14/20 13:27	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/08/20 15:43	01/14/20 13:27	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/08/20 15:43	01/14/20 13:27	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/08/20 15:43	01/14/20 13:27	1
4-Chloroaniline	ND		10	3.4	ug/L		01/08/20 15:43	01/14/20 13:27	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/08/20 15:43	01/14/20 13:27	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/08/20 15:43	01/14/20 13:27	1
2-Chlorophenol	ND		10	2.2	ug/L		01/08/20 15:43	01/14/20 13:27	1

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

Lab Sample ID: MB 400-473324/1-A
Matrix: Water
Analysis Batch: 473903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
Dibenzofuran	ND		10	0.52	ug/L		01/08/20 15:43	01/14/20 13:27	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
Diethyl phthalate	ND		10	0.70	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/08/20 15:43	01/14/20 13:27	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/08/20 15:43	01/14/20 13:27	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/08/20 15:43	01/14/20 13:27	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/08/20 15:43	01/14/20 13:27	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/08/20 15:43	01/14/20 13:27	1
1,4-Dioxane	ND		10	1.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/08/20 15:43	01/14/20 13:27	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/08/20 15:43	01/14/20 13:27	1
Hexachloroethane	ND		10	4.2	ug/L		01/08/20 15:43	01/14/20 13:27	1
Indene	7.99	J	10	1.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
Isophorone	ND		10	0.57	ug/L		01/08/20 15:43	01/14/20 13:27	1
2-Methylphenol	ND		10	1.8	ug/L		01/08/20 15:43	01/14/20 13:27	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
2-Nitroaniline	ND		10	2.2	ug/L		01/08/20 15:43	01/14/20 13:27	1
3-Nitroaniline	ND		10	1.8	ug/L		01/08/20 15:43	01/14/20 13:27	1
4-Nitroaniline	ND		10	2.5	ug/L		01/08/20 15:43	01/14/20 13:27	1
Nitrobenzene	ND		10	0.55	ug/L		01/08/20 15:43	01/14/20 13:27	1
2-Nitrophenol	ND		10	0.65	ug/L		01/08/20 15:43	01/14/20 13:27	1
4-Nitrophenol	ND		10	2.1	ug/L		01/08/20 15:43	01/14/20 13:27	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/08/20 15:43	01/14/20 13:27	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/08/20 15:43	01/14/20 13:27	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/08/20 15:43	01/14/20 13:27	1
Pentachlorophenol	ND		20	1.8	ug/L		01/08/20 15:43	01/14/20 13:27	1
Phenol	ND		10	2.6	ug/L		01/08/20 15:43	01/14/20 13:27	1
Pyridine	ND		10	3.2	ug/L		01/08/20 15:43	01/14/20 13:27	1
Quinoline	ND		10	6.0	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/08/20 15:43	01/14/20 13:27	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/08/20 15:43	01/14/20 13:27	1

Surrogate	MB *%Recovery*	MB *Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*01/08/20 15:43*	*01/14/20 13:27*	*1*
2-Fluorophenol	*55*		*10 - 120*	*01/08/20 15:43*	*01/14/20 13:27*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*01/08/20 15:43*	*01/14/20 13:27*	*1*
Phenol-d5	*74*		*10 - 120*	*01/08/20 15:43*	*01/14/20 13:27*	*1*
Terphenyl-d14	*93*		*53 - 125*	*01/08/20 15:43*	*01/14/20 13:27*	*1*
2,4,6-Tribromophenol	*67*		*15 - 135*	*01/08/20 15:43*	*01/14/20 13:27*	*1*

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

Lab Sample ID: LCS 400-473324/2-A
Matrix: Water
Analysis Batch: 473752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	19.6		ug/L		65	29 - 120
Benzoic acid	117	83.6		ug/L		72	10 - 150
Benzyl alcohol	30.0	22.4		ug/L		75	19 - 125
Bis(2-chloroethoxy)methane	30.0	20.8		ug/L		69	45 - 120
Bis(2-chloroethyl)ether	30.0	20.1		ug/L		67	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.5		ug/L		68	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	21.9		ug/L		73	48 - 150
4-Bromophenyl phenyl ether	30.0	18.7		ug/L		62	55 - 122
Butyl benzyl phthalate	30.0	21.3		ug/L		71	46 - 145
4-Chloroaniline	30.0	17.5		ug/L		58	30 - 120
4-Chloro-3-methylphenol	30.0	22.4		ug/L		75	39 - 140
2-Chloronaphthalene	30.0	21.1		ug/L		70	52 - 120
2-Chlorophenol	30.0	19.8		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	22.1		ug/L		74	58 - 124
Dibenz[a,h]acridine	30.0	14.6		ug/L		49	46 - 149
Dibenzofuran	30.0	22.8		ug/L		76	58 - 123
3,3'-Dichlorobenzidine	40.0	35.3		ug/L		88	39 - 135
2,4-Dichlorophenol	30.0	21.0		ug/L		70	39 - 128
Diethyl phthalate	30.0	24.5		ug/L		82	44 - 146
2,4-Dimethylphenol	30.0	21.8		ug/L		73	44 - 120
Dimethyl phthalate	30.0	23.4		ug/L		78	50 - 131
Di-n-butyl phthalate	30.0	25.7		ug/L		86	55 - 131
4,6-Dinitro-ortho-cresol	60.0	45.6		ug/L		76	10 - 150
2,4-Dinitrophenol	60.0	50.1		ug/L		83	10 - 150
2,4-Dinitrotoluene	30.0	24.5		ug/L		82	58 - 140
2,6-Dinitrotoluene	30.0	23.6		ug/L		79	57 - 130
Di-n-octyl phthalate	30.0	22.0		ug/L		73	50 - 150
1,4-Dioxane	30.0	17.9		ug/L		60	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.4		ug/L		68	47 - 123
Hexachlorobenzene	30.0	19.9		ug/L		66	52 - 131
Hexachlorocyclopentadiene	30.0	12.1	J	ug/L		40	10 - 129
Hexachloroethane	30.0	13.3		ug/L		44	20 - 120
Indene	30.0	17.4	B	ug/L		58	47 - 120
Isophorone	30.0	21.1		ug/L		70	49 - 120
2-Methylphenol	30.0	20.7		ug/L		69	39 - 123
3 & 4 Methylphenol	30.0	21.6		ug/L		72	38 - 121
2-Nitroaniline	30.0	25.0		ug/L		83	47 - 150
3-Nitroaniline	30.0	23.0		ug/L		77	34 - 132
4-Nitroaniline	30.0	29.2		ug/L		97	41 - 135
Nitrobenzene	30.0	19.9		ug/L		66	47 - 120
2-Nitrophenol	30.0	21.0		ug/L		70	28 - 136
4-Nitrophenol	60.0	50.5		ug/L		84	10 - 150
N-Nitrosodimethylamine	30.0	19.9		ug/L		66	22 - 148
N-Nitrosodi-n-propylamine	30.0	21.4		ug/L		71	44 - 120
N-Nitrosodiphenylamine	29.8	20.3		ug/L		68	56 - 120
Pentachlorophenol	60.0	47.7		ug/L		80	15 - 141
Phenol	30.0	19.4		ug/L		65	33 - 120
Pyridine	60.0	33.6		ug/L		56	26 - 120

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

Lab Sample ID: LCS 400-473324/2-A
Matrix: Water
Analysis Batch: 473752

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	22.4		ug/L		75	51 - 129
2,4,5-Trichlorophenol	30.0	23.4		ug/L		78	38 - 147
2,4,6-Trichlorophenol	30.0	23.9		ug/L		80	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*66*		*10 - 120*
Terphenyl-d14	*68*		*53 - 125*
2,4,6-Tribromophenol	*92*		*15 - 135*

Lab Sample ID: LCS 400-473324/30-A
Matrix: Water
Analysis Batch: 473903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473324

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*
2-Fluorophenol	*45*		*10 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*86*		*53 - 125*
2,4,6-Tribromophenol	*69*		*15 - 135*

Lab Sample ID: LCSD 400-473324/31-A
Matrix: Water
Analysis Batch: 473903

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120	26	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*34 - 120*
2-Fluorophenol	*46*		*10 - 120*
Nitrobenzene-d5	*86*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*98*		*53 - 125*
2,4,6-Tribromophenol	*73*		*15 - 135*

Lab Sample ID: LCSD 400-473324/3-A
Matrix: Water
Analysis Batch: 473752

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473324

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	5	30

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

Lab Sample ID: LCSD 400-473324/3-A
Matrix: Water
Analysis Batch: 473752

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzoic acid	117	89.2		ug/L		77	10 - 150	6	30
Benzyl alcohol	30.0	22.5		ug/L		75	19 - 125	0	30
Bis(2-chloroethoxy)methane	30.0	20.8		ug/L		69	45 - 120	0	30
Bis(2-chloroethyl)ether	30.0	20.5		ug/L		68	48 - 120	2	30
bis (2-chloroisopropyl) ether	30.0	20.8		ug/L		69	30 - 125	1	30
Bis(2-ethylhexyl) phthalate	30.0	22.0		ug/L		73	48 - 150	0	30
4-Bromophenyl phenyl ether	30.0	19.1		ug/L		64	55 - 122	2	30
Butyl benzyl phthalate	30.0	21.9		ug/L		73	46 - 145	3	30
4-Chloroaniline	30.0	17.9		ug/L		60	30 - 120	2	30
4-Chloro-3-methylphenol	30.0	23.0		ug/L		77	39 - 140	2	30
2-Chloronaphthalene	30.0	21.4		ug/L		71	52 - 120	2	30
2-Chlorophenol	30.0	19.3		ug/L		64	34 - 120	2	30
4-Chlorophenyl phenyl ether	30.0	22.1		ug/L		74	58 - 124	0	30
Dibenz[a,h]acridine	30.0	14.8		ug/L		49	46 - 149	1	30
Dibenzofuran	30.0	22.9		ug/L		76	58 - 123	0	30
3,3'-Dichlorobenzidine	40.0	36.1		ug/L		90	39 - 135	2	30
2,4-Dichlorophenol	30.0	21.4		ug/L		71	39 - 128	2	30
Diethyl phthalate	30.0	24.7		ug/L		82	44 - 146	1	30
2,4-Dimethylphenol	30.0	22.0		ug/L		73	44 - 120	1	30
Dimethyl phthalate	30.0	23.9		ug/L		80	50 - 131	2	30
Di-n-butyl phthalate	30.0	25.7		ug/L		86	55 - 131	0	30
4,6-Dinitro-ortho-cresol	60.0	45.7		ug/L		76	10 - 150	0	30
2,4-Dinitrophenol	60.0	51.6		ug/L		86	10 - 150	3	30
2,4-Dinitrotoluene	30.0	24.5		ug/L		82	58 - 140	0	30
2,6-Dinitrotoluene	30.0	24.0		ug/L		80	57 - 130	2	30
Di-n-octyl phthalate	30.0	22.2		ug/L		74	50 - 150	1	30
1,4-Dioxane	30.0	17.1		ug/L		57	25 - 120	5	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.5		ug/L		68	47 - 123	0	30
Hexachlorobenzene	30.0	20.2		ug/L		67	52 - 131	1	30
Hexachlorocyclopentadiene	30.0	10.3	J	ug/L		34	10 - 129	16	30
Hexachloroethane	30.0	13.4		ug/L		45	20 - 120	1	30
Indene	30.0	17.6	B	ug/L		59	47 - 120	1	30
Isophorone	30.0	21.4		ug/L		71	49 - 120	2	30
2-Methylphenol	30.0	20.5		ug/L		68	39 - 123	1	30
3 & 4 Methylphenol	30.0	21.9		ug/L		73	38 - 121	2	30
2-Nitroaniline	30.0	25.1		ug/L		84	47 - 150	1	30
3-Nitroaniline	30.0	22.9		ug/L		76	34 - 132	0	30
4-Nitroaniline	30.0	29.3		ug/L		98	41 - 135	0	30
Nitrobenzene	30.0	20.2		ug/L		67	47 - 120	1	30
2-Nitrophenol	30.0	21.5		ug/L		72	28 - 136	2	30
4-Nitrophenol	60.0	54.4		ug/L		91	10 - 150	7	30
N-Nitrosodimethylamine	30.0	20.5		ug/L		68	22 - 148	3	30
N-Nitrosodi-n-propylamine	30.0	21.7		ug/L		72	44 - 120	2	30
N-Nitrosodiphenylamine	29.8	20.6		ug/L		69	56 - 120	1	30
Pentachlorophenol	60.0	48.9		ug/L		81	15 - 141	2	30
Phenol	30.0	19.9		ug/L		66	33 - 120	2	30
Pyridine	60.0	36.4		ug/L		61	26 - 120	8	30
Quinoline	30.0	23.2		ug/L		77	51 - 129	4	30

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

Lab Sample ID: LCSD 400-473324/3-A
Matrix: Water
Analysis Batch: 473752

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473324

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol			30.0	24.3		ug/L		81	38 - 147	4	30
2,4,6-Trichlorophenol			30.0	24.2		ug/L		81	36 - 139	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*69*		*53 - 125*
2,4,6-Tribromophenol	*93*		*15 - 135*

Lab Sample ID: MB 400-476444/1-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		02/03/20 11:34	02/06/20 23:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
2-Fluorophenol	*57*		*10 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
Phenol-d5	*65*		*10 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
Terphenyl-d14	*77*		*53 - 125*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
2,4,6-Tribromophenol	*51*		*15 - 135*	*02/03/20 11:34*	*02/06/20 23:53*	*1*

Lab Sample ID: LCS 400-476444/2-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476444

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate			30.0	28.7		ug/L		96	48 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*52*		*34 - 120*
2-Fluorophenol	*57*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*64*		*10 - 120*
Terphenyl-d14	*63*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

Lab Sample ID: LCSD 400-476444/3-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476444

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			30.0	22.8		ug/L		76	48 - 150	23	30

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

Lab Sample ID: LCSD 400-476444/3-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476444

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	55		34 - 120
2-Fluorophenol	58		10 - 120
Nitrobenzene-d5	85		27 - 120
Phenol-d5	68		10 - 120
Terphenyl-d14	67		53 - 125
2,4,6-Tribromophenol	53		15 - 135

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

Lab Sample ID: MB 400-473324/1-A
Matrix: Water
Analysis Batch: 473920

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
Anthracene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Chrysene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Fluoranthene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
Fluorene	ND		0.20	0.021	ug/L		01/08/20 15:43	01/14/20 11:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		01/08/20 15:43	01/14/20 11:11	1
Phenanthrene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
Pyrene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/08/20 15:43	01/14/20 11:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	104		33 - 138	01/08/20 15:43	01/14/20 11:11	1
2-Fluorobiphenyl	115		15 - 122	01/08/20 15:43	01/14/20 11:11	1
Nitrobenzene-d5	97		19 - 130	01/08/20 15:43	01/14/20 11:11	1

Lab Sample ID: LCS 400-473324/2-A
Matrix: Water
Analysis Batch: 473920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	27.8		ug/L		93	41 - 120
Acenaphthylene	30.0	26.3		ug/L		88	44 - 120
Anthracene	30.0	24.6		ug/L		82	49 - 120
Benzo[a]anthracene	30.0	20.3		ug/L		68	61 - 135
Benzo[a]pyrene	30.0	22.1		ug/L		74	52 - 120
Benzo[b]fluoranthene	30.0	23.9		ug/L		80	53 - 134

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

Lab Sample ID: LCS 400-473324/2-A
Matrix: Water
Analysis Batch: 473920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	30.0	26.2		ug/L		87	47 - 133
Benzo[k]fluoranthene	30.0	21.6		ug/L		72	57 - 134
Chrysene	30.0	20.3		ug/L		68	55 - 122
Dibenz(a,h)anthracene	30.0	30.5		ug/L		102	48 - 146
Fluoranthene	30.0	25.4		ug/L		85	54 - 128
Fluorene	30.0	28.2		ug/L		94	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	28.9		ug/L		96	43 - 142
Phenanthrene	30.0	25.0		ug/L		83	48 - 120
Pyrene	30.0	21.4		ug/L		71	48 - 132
1-Methylnaphthalene	30.0	22.2		ug/L		74	41 - 120
2-Methylnaphthalene	30.0	22.3		ug/L		74	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*81*		*33 - 138*
2-Fluorobiphenyl	*87*		*15 - 122*
Nitrobenzene-d5	*70*		*19 - 130*

Lab Sample ID: LCSD 400-473324/3-A
Matrix: Water
Analysis Batch: 473920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473324

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.5		ug/L		98	41 - 120	6	56
Acenaphthylene	30.0	26.7		ug/L		89	44 - 120	2	56
Anthracene	30.0	24.2		ug/L		81	49 - 120	2	51
Benzo[a]anthracene	30.0	22.2		ug/L		74	61 - 135	9	49
Benzo[a]pyrene	30.0	23.4		ug/L		78	52 - 120	6	50
Benzo[b]fluoranthene	30.0	22.8		ug/L		76	53 - 134	4	54
Benzo[g,h,i]perylene	30.0	25.5		ug/L		85	47 - 133	3	50
Benzo[k]fluoranthene	30.0	22.4		ug/L		75	57 - 134	4	52
Chrysene	30.0	21.1		ug/L		70	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	29.2		ug/L		97	48 - 146	4	50
Fluoranthene	30.0	25.3		ug/L		84	54 - 128	0	52
Fluorene	30.0	29.7		ug/L		99	45 - 125	5	56
Indeno[1,2,3-cd]pyrene	30.0	28.6		ug/L		95	43 - 142	1	51
Phenanthrene	30.0	24.5		ug/L		82	48 - 120	2	56
Pyrene	30.0	22.1		ug/L		74	48 - 132	3	52
1-Methylnaphthalene	30.0	23.5		ug/L		78	41 - 120	6	55
2-Methylnaphthalene	30.0	23.0		ug/L		77	32 - 124	3	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*83*		*33 - 138*
2-Fluorobiphenyl	*86*		*15 - 122*
Nitrobenzene-d5	*71*		*19 - 130*

QC Sample Results

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

Job ID: 400-182255-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-473412/1-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473412

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		01/09/20 09:56	01/10/20 13:45	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/09/20 09:56	01/10/20 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/09/20 09:56*	*01/10/20 13:45*	*1*

Lab Sample ID: LCS 400-473412/2-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.161	*	ug/L		161	60 - 140
1,2-Dibromoethane	0.100	0.139		ug/L		139	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*51 - 149*

Lab Sample ID: LCSD 400-473412/3-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473412

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.121		ug/L		121	60 - 140	28	30
1,2-Dibromoethane	0.100	0.0959	*	ug/L		96	60 - 140	37	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*70*		*51 - 149*

Lab Sample ID: MB 400-473543/1-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473543

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		01/10/20 09:24	01/17/20 07:43	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/10/20 09:24	01/17/20 07:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*51 - 149*	*01/10/20 09:24*	*01/17/20 07:43*	*1*

Lab Sample ID: LCS 400-473543/2-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.205	*	ug/L		205	60 - 140
1,2-Dibromoethane	0.100	0.0958		ug/L		96	60 - 140

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-473543/2-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473543

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	126		51 - 149

Lab Sample ID: LCSD 400-473543/3-A
Matrix: Water
Analysis Batch: 474311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473543

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.204	*	ug/L		204	60 - 140	1	30
1,2-Dibromoethane	0.100	0.111		ug/L		111	60 - 140	14	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	124		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/7/2020
PAGE: 1 of 2

PO #: 60619901 - 1.03.001 | 60619901 - 1.03.0011

GSAP Project ID: USPC/00114/R/02

COMPANY: AECOM

LOAD CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW
60619901 - 1.03.001 | 60619901 - 1.03.0011

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDD 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): James Raggatz, Ben Burleson

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 ON WEEKEND ☐ RESULTS NEEDED

☐ IA - 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 Report
* 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 - 1.03.001: VOC 8260, SVOC 8270

UNIT COST 60619901 - 1.03.0011: VOC 8011, PAH 8270LL

400-182255 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-010720-8260-A	1/7/20	0000	Water	2					2	2			
	TB-ROX-010720-8011-A	1/7/20	0000	H2O	2					2			2	
	P54-ROX-010720-EB	1/7/20	0815	H2O	4			2		6	2	1	2	1
	P54-ROX-010720	1/7/20	0920	H2O	4			2		6	2	1	2	1
	MW24-ROX-010720	1/7/20	1010	H2O	4			2		6	2	1	2	1
	MW11-ROX-010720	1/7/20	1055	H2O	4			2		6	2	1	2	1
	MW27-ROX-010720	1/7/20	1155	H2O	4			2		6	2	1	2	1
	MW12-ROX-010720	1/7/20	1340	H2O	4			2		6	2	1	2	1

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
James Raggatz	Fedex: 1275 88856565 1275 88856587 / 1275 88856576 1275 88856598	1/7/2020	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 1-8-20	Time: 8:56

Version: 14Dec19

Custody Seal #s: 1197528, 1197529, 1197530, 1197531, 1197532, 1197533, 1197534, 1197535

2.2°, 0.3°, 1.6°, 0.6° IR8

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: Bob Billman

PlaNet Site or Project ID: 25278

PO #: 60619901 - 1.03.001 | 60619901 - 1.03.0011

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/7/2020

PAGE: 2 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 - 1.03.001 | 60619901 - 1.03.0011

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

Fed To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

LEDD 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): Mary D'Angelo Brett Howell

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ON WEEKEND ☐ RESULTS NEEDED

☐ IA - 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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.001: VOC 8260, SVOC 8270

UNIT COST 60619901 - 1.03.0011: 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-010720-8260-B	1/7/20	0000	Water	X					2	X			
	TB-ROX-010720-8011-B		0000		X					2			X	
	MW14-ROX-010720-EB		0840		X			X		6	X	X	X	X
	MW14-ROX-010720		0850		X			X		6	X	X	X	X
	P66-ROX-010720		1125		X			X		6	X	X	X	X
	ROST4PZC-ROX-010720		1335		X			X		6	X	X	X	X
	ROST4PZE-ROX-010720		1415		X			X		6	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
M D'Angelo	Fedex: Same as Page 1	1/7/2020	1600
		1-8-20	8:56

Version: 14Dec16

Custody Seal #s: Same as Page 1

2.2°, 0.3°, 1.6°, 0.6° IR8

Page 94 of 96

2/19/2020 (Rev. 2)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182255-1

Login Number: 182255
List Number: 1
Creator: Brown, Nathan

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	2.2°C, 0.3°C, 1.6°C, 0.6°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182255-1

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	02-22-20
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	200041	10-09-19 *
Illinois	NELAP	004586	10-09-19 *
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	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182302-1-Rev. 2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 2/10/2020

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

Sample Identification	Sample Identification
TB-ROX-010820-8260-BP	TB-ROX-010820-8011-BP
MW23-ROX-010820	

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, laboratory case narrative indicated bis(2-ethylhexyl) phthalate was re-extracted outside of the extraction holding time criteria in sample MW23-ROX-010820. bis(2-Ethylhexyl) phthalate was detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The SVOC internal standard recovery for chrysene-d_{12} was outside criteria in the continuing calibration verification. The continuing calibration verifications for hexachlorocyclopentadiene and quinoline were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised to include re-analysis of pentachlorophenol, and re-extraction and re-analysis of bis(2-ethylhexyl) phthalate in sample MW23-ROX-010820.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, bis(2-ethylhexyl) phthalate was re-extracted 19 days outside of the extraction holding time criteria (7 days) in sample MW23-ROX-010820 due to results that were not consistent with the historical, and due to known laboratory contamination. Professional judgement was used to qualify as estimated (**UJ**); however, not reject the out of holding time data. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-010820-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-473677/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	6.53 µg/L

bis(2-Ethylhexyl) phthalate data in sample MW23-ROX-010820 is reported from the re-extracted run (MW23-ROX-010820-RE) and is previously qualified in Section 3.0 of this review due to holding time criteria. bis(2-Ethylhexyl) phthalate was non-detect in the re-extracted run (RE); therefore, 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 400-473735/1002	VOCs	Bromomethane	**166**	NA	10-160
LCS 400-473735/1002	VOCs	Chloroethane	**144**	NA	55-141
LCS 400-473735/1002	VOCs	Hexachlorobutadiene	**146**	NA	53-140
LCS/LCSD 400-473677/2-A/3-A	SVOCs	Benzoic acid	35/20	**53**	10-150/30
LCS/LCSD 400-473677/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	102/**157**	**43**	48-150/30
LCS/LCSD 400-473677/2-A/3-A	SVOCs	2,4-Dinitrophenol	22/32	**39**	10-150/30
LCS/LCSD 400-473677/4-A/5-A	SVOCs	Benzenethiol	**2/2**	9	10-120/30
LCS/LCSD 400-473548/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	134/**196**	**39**	60-140/30
LCS/LCSD 400-473548/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	86/117	**34**	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. bis(2-Ethylhexyl) phthalate data in sample MW23-ROX-010820 is reported from the re-extracted run (MW23-ROX-010820-RE) and is previously qualified in Section 3.0 of this review due to holding time criteria. bis(2-Ethylhexyl) phthalate was non-detect in the re-extracted run (RE); therefore, no qualification of data was required.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-010820	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	IS Criteria
ICV 400-472769/11	SVOCs	Chrysene-d_{12}	**381274**	417202-1668806

Initial calibration verifications (ICV) are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for hexachlorocyclopentadiene and quinoline were outside evaluation criteria, biased low, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW23-ROX-010820	SVOCs	Quinoline	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-182302-1
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:
2/19/2020 9:25:20 AM
Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

Designee for

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Reviewed 2/24/2020 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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Certification Summary 37

Job ID: 400-182302-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-182302-1

Comments
021920 Revised Report to include pentachlorophenol results originally reported for sample -3.; both original and re-analysis results are reported. This report replaces the report previously issued on 020720.

020720 Revised Report to correct pentachlorophenol results on sample -3 after re-analysis and to provide secondary results for bis(2-ethylhexyl) phthalate after re-extraction and re-analysis out of hold time. This report replaces the report previously issued on 012720.

Receipt
The samples were received on 1/9/2020 9:36 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.2° C, 1.5° C, 1.6° C and 2.9° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-473735 recovered above the upper control limit for 1,2-Dichloropropane, Bromomethane, Chloroform 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 400-473735 recovered outside control limits for the following analytes: Bromomethane, Chloroethane and Hexachlorobutadiene. 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-010820-8260-BP (400-182302-1) and MW23-ROX-010820 (400-182302-3). 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 initial calibration verification (ICV) analyzed in batch 400-469009 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The method blank for preparation batch 400-473677 and analytical batch 400-474099 contained Bis(2-ethylhexyl) phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-474099 recovered above the upper control limit for 4-Nitrophenol 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 400-474099 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Quinoline. 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 laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-473677 and analytical batch 400-474099 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 laboratory control sample duplicate (LCSD) for preparation batch 400-473677 and analytical batch 400-473927 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 400-182302-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-473677 and analytical batch 400-473927 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, Benzoic acid and Bis(2-ethylhexyl) phthalate.

Method 8270D: The following sample was re-prepared outside holding time for confirmation of bis (2-ethylhexyl) phthalate in the original extract: MW23-ROX-010820 (400-182302-3).

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 400-474274/2). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-473548 and analytical batch 400-473595 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane.

Method 8011: The laboratory control sample duplicate (LCSD) for preparation batch 400-473548 and analytical batch 400-473595 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-473595 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: 400-182302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182302-1	TB-ROX-010820-8260-BP	Water	01/08/20 00:00	01/09/20 09:36	
400-182302-2	TB-ROX-010820-8011-BP	Water	01/08/20 00:00	01/09/20 09:36	
400-182302-3	MW23-ROX-010820	Water	01/08/20 13:15	01/09/20 09:36	

Detection Summary

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

Job ID: 400-182302-1

Client Sample ID: TB-ROX-010820-8260-BP

Lab Sample ID: 400-182302-1

No Detections.

Client Sample ID: TB-ROX-010820-8011-BP

Lab Sample ID: 400-182302-2

No Detections.

Client Sample ID: MW23-ROX-010820

Lab Sample ID: 400-182302-3

* Do not use this data. Use re-extraction (RE) data.

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.1		1.0	0.74	ug/L	1		8260B	Total/NA
* ~~Bis(2-ethylhexyl) phthalate~~	~~9.3~~	~~J * B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Pentachlorophenol	2.2	J	19	1.7	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: 400-182302-1

Client Sample ID: TB-ROX-010820-8260-BP
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182302-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 12:04	1
Acrolein	ND		20	10	ug/L			01/13/20 12:04	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 12:04	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 12:04	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 12:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 12:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 12:04	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 12:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 12:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 12:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 12:04	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 12:04	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 12:04	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 12:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 12:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 12:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 12:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 12:04	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 12:04	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 12:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 12:04	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 12:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 12:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 12:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 12:04	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 12:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 12:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 12:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 12:04	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 12:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 12:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 12:04	1

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

Job ID: 400-182302-1

Client Sample ID: TB-ROX-010820-8260-BP
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182302-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 12:04	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 12:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 12:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 12:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 12:04	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 12:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 12:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 12:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 12:04	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 12:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 12:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 12:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 12:04	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 12:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 12:04	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*01/13/20 12:04*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*01/13/20 12:04*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/13/20 12:04*	*1*

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

Job ID: 400-182302-1

Client Sample ID: TB-ROX-010820-8011-BP
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182302-2
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		01/10/20 09:28	01/10/20 21:08	1
1,2-Dibromoethane	ND	*	0.021	0.0051	ug/L		01/10/20 09:28	01/10/20 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/10/20 09:28*	*01/10/20 21:08*	*1*

Client Sample Results

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

Job ID: 400-182302-1

Client Sample ID: MW23-ROX-010820

Lab Sample ID: 400-182302-3

Date Collected: 01/08/20 13:15
Date Received: 01/09/20 09:36

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 16:05	1
Acrolein	ND		20	10	ug/L			01/13/20 16:05	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 16:05	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 16:05	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 16:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 16:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 16:05	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 16:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 16:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 16:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 16:05	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 16:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 16:05	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 16:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 16:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 16:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 16:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 16:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 16:05	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 16:05	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 16:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 16:05	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 16:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 16:05	1
Methyl tert-butyl ether	1.1		1.0	0.74	ug/L			01/13/20 16:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 16:05	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 16:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 16:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 16:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 16:05	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 16:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 16:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 16:05	1

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

Job ID: 400-182302-1

Client Sample ID: MW23-ROX-010820
Date Collected: 01/08/20 13:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182302-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 16:05	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 16:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 16:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 16:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 16:05	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 16:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 16:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 16:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 16:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 16:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 16:05	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 16:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 16:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 16:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 16:05	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 16:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 16:05	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*01/13/20 16:05*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*01/13/20 16:05*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/13/20 16:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 14:21	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:21	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*114*		*33 - 138*	*01/10/20 17:35*	*01/16/20 14:21*	*1*
2-Fluorobiphenyl	*82*		*15 - 122*	*01/10/20 17:35*	*01/16/20 14:21*	*1*

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

Job ID: 400-182302-1

Client Sample ID: MW23-ROX-010820
Date Collected: 01/08/20 13:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182302-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	90		19 - 130	01/10/20 17:35	01/16/20 14:21	1

*Do not use this data. Use re-extraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 15:03	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 15:03	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 15:03	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 15:03	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 15:03	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 15:03	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/10/20 17:35	01/15/20 15:03	1
~~Bis(2-ethylhexyl) phthalate~~	~~9.3~~	~~J * B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/10/20 17:35~~	~~01/15/20 15:03~~	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 15:03	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 15:03	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:03	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 15:03	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 15:03	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 15:03	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 15:03	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 15:03	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 15:03	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 15:03	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:03	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/10/20 17:35	01/15/20 15:03	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 15:03	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 15:03	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 15:03	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 15:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 15:03	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 15:03	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 15:03	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 15:03	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 15:03	1
Isophorone	ND		9.6	0.54	ug/L		01/10/20 17:35	01/15/20 15:03	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 15:03	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/10/20 17:35	01/15/20 15:03	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 15:03	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 15:03	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 15:03	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 15:03	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 15:03	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 15:03	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:03	1

Client Sample ID: MW23-ROX-010820
Date Collected: 01/08/20 13:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182302-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 15:03	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 15:03	1
Pentachlorophenol	2.2	J	19	1.7	ug/L		01/10/20 17:35	01/15/20 15:03	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 15:03	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 15:03	1
Quinoline	ND	UJ	9.6	5.7	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 15:03	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*01/10/20 17:35*	*01/15/20 15:03*	*1*
2-Fluorophenol	*44*		*10 - 120*	*01/10/20 17:35*	*01/15/20 15:03*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*01/10/20 17:35*	*01/15/20 15:03*	*1*
Phenol-d5	*62*		*10 - 120*	*01/10/20 17:35*	*01/15/20 15:03*	*1*
Terphenyl-d14	*75*		*53 - 125*	*01/10/20 17:35*	*01/15/20 15:03*	*1*
2,4,6-Tribromophenol	*66*		*15 - 135*	*01/10/20 17:35*	*01/15/20 15:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/31/20 14:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H UJ	9.5	4.8	ug/L		02/03/20 11:34	02/07/20 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*34 - 120*	*02/03/20 11:34*	*02/07/20 01:35*	*1*
2-Fluorophenol	*58*		*10 - 120*	*02/03/20 11:34*	*02/07/20 01:35*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*02/03/20 11:34*	*02/07/20 01:35*	*1*
Phenol-d5	*63*		*10 - 120*	*02/03/20 11:34*	*02/07/20 01:35*	*1*
Terphenyl-d14	*61*		*53 - 125*	*02/03/20 11:34*	*02/07/20 01:35*	*1*
2,4,6-Tribromophenol	*59*		*15 - 135*	*02/03/20 11:34*	*02/07/20 01:35*	*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	0.0057	ug/L		01/10/20 09:28	01/10/20 21:29	1
1,2-Dibromoethane	ND	*	0.021	0.0052	ug/L		01/10/20 09:28	01/10/20 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*01/10/20 09:28*	*01/10/20 21:29*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the 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: 400-182302-1

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)
400-182302-1	TB-ROX-010820-8260-BP	99	94	89
400-182302-3	MW23-ROX-010820	96	96	91
LCS 400-473735/1002	Lab Control Sample	87	97	88
MB 400-473735/4	Method Blank	91	92	88

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)
400-182302-3	MW23-ROX-010820	57	44	67	62	75	66
400-182302-3 - RE	MW23-ROX-010820	60	58	76	63	61	59
LCS 400-473677/2-A	Lab Control Sample	75	62	80	77	92	89
LCS 400-473677/4-A	Lab Control Sample	57	35	75	62	79	27
LCS 400-476444/2-A	Lab Control Sample	52	57	80	64	63	51
LCSD 400-473677/3-A	Lab Control Sample Dup	83	67	86	83	100	99
LCSD 400-473677/5-A	Lab Control Sample Dup	55	57	72	70	77	47
LCSD 400-476444/3-A	Lab Control Sample Dup	55	58	85	68	67	53
MB 400-473677/1-A	Method Blank	52	41	67	62	70	44
MB 400-476444/1-A	Method Blank	57	57	76	65	77	51

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)
400-182302-3	MW23-ROX-010820	114	82	90
LCS 400-473677/2-A	Lab Control Sample	103	80	93
LCSD 400-473677/3-A	Lab Control Sample Dup	97	70	88
MB 400-473677/1-A	Method Blank	126	86	99

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: 400-182302-1

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)
400-182302-2	TB-ROX-010820-8011-BP	93
400-182302-3	MW23-ROX-010820	94
LCS 400-473548/2-A	Lab Control Sample	73
LCSD 400-473548/3-A	Lab Control Sample Dup	101
MB 400-473548/1-A	Method Blank	74

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-182302-1

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-010820-8260-BP

Lab Sample ID: 400-182302-1
Matrix: Water

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 12:04	AMB	TAL PEN

Client Sample ID: TB-ROX-010820-8011-BP

Lab Sample ID: 400-182302-2
Matrix: Water

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 21:08	DS	TAL PEN

Client Sample ID: MW23-ROX-010820

Lab Sample ID: 400-182302-3
Matrix: Water

Date Collected: 01/08/20 13:15
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 16:05	AMB	TAL PEN
Total/NA	Prep	3520C	RA		1046 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			476181	01/31/20 14:33	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1050.8 mL	1 mL	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			476960	02/07/20 01:35	VC1	TAL PEN
Total/NA	Prep	3520C			1046 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 15:03	KJA	TAL PEN
Total/NA	Prep	3520C			1046 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 14:21	PP1	TAL PEN
Total/NA	Prep	8011			33.8 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 21:29	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473548/1-A
Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 20:07	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473677/1-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 13:59	KJA	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 13:25	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473735/4

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	473735	01/13/20 09:09	AMB	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-476444/1-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/06/20 23:53	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473548/2-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	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 20:27	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473677/2-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			473927	01/14/20 15:48	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474274	01/16/20 13:43	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473677/4-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 14:20	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-473735/1002

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	473735	01/13/20 08:12	AMB	TAL PEN

Lab Chronicle

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

Job ID: 400-182302-1

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

Lab Sample ID: LCS 400-476444/2-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/07/20 00:19	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-473548/3-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	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 20:48	DS	TAL PEN

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

Lab Sample ID: LCSD 400-473677/3-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			473927	01/14/20 16:10	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474274	01/16/20 14:02	PP1	TAL PEN

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

Lab Sample ID: LCSD 400-473677/5-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 14:42	KJA	TAL PEN

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

Lab Sample ID: LCSD 400-476444/3-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/07/20 00:44	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: 473735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-1	TB-ROX-010820-8260-BP	Total/NA	Water	8260B	
400-182302-3	MW23-ROX-010820	Total/NA	Water	8260B	
MB 400-473735/4	Method Blank	Total/NA	Water	8260B	
LCS 400-473735/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 473677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-3 - RA	MW23-ROX-010820	Total/NA	Water	3520C	
400-182302-3	MW23-ROX-010820	Total/NA	Water	3520C	
MB 400-473677/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-473677/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-473677/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-473677/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-473677/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 473927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-473677/2-A	Lab Control Sample	Total/NA	Water	8270D	473677
LCSD 400-473677/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	473677

Analysis Batch: 474099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-3	MW23-ROX-010820	Total/NA	Water	8270D	473677
MB 400-473677/1-A	Method Blank	Total/NA	Water	8270D	473677
LCS 400-473677/4-A	Lab Control Sample	Total/NA	Water	8270D	473677
LCSD 400-473677/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	473677

Analysis Batch: 474274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-3	MW23-ROX-010820	Total/NA	Water	8270D LL	473677
MB 400-473677/1-A	Method Blank	Total/NA	Water	8270D LL	473677
LCS 400-473677/2-A	Lab Control Sample	Total/NA	Water	8270D LL	473677
LCSD 400-473677/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	473677

Analysis Batch: 476181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-3 - RA	MW23-ROX-010820	Total/NA	Water	8270D	473677

Prep Batch: 476444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-3 - RE	MW23-ROX-010820	Total/NA	Water	3520C	
MB 400-476444/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 476960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-3 - RE	MW23-ROX-010820	Total/NA	Water	8270D	476444
MB 400-476444/1-A	Method Blank	Total/NA	Water	8270D	476444

GC/MS Semi VOA (Continued)

Analysis Batch: 476960 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	8270D	476444
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	476444

GC Semi VOA

Prep Batch: 473548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-2	TB-ROX-010820-8011-BP	Total/NA	Water	8011	
400-182302-3	MW23-ROX-010820	Total/NA	Water	8011	
MB 400-473548/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473548/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473548/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 473595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182302-2	TB-ROX-010820-8011-BP	Total/NA	Water	8011	473548
400-182302-3	MW23-ROX-010820	Total/NA	Water	8011	473548
MB 400-473548/1-A	Method Blank	Total/NA	Water	8011	473548
LCS 400-473548/2-A	Lab Control Sample	Total/NA	Water	8011	473548
LCSD 400-473548/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473548

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

Lab Sample ID: MB 400-473735/4
Matrix: Water
Analysis Batch: 473735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 09:09	1
Acrolein	ND		20	10	ug/L			01/13/20 09:09	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 09:09	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 09:09	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 09:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 09:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 09:09	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/20 09:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 09:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/20 09:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 09:09	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 09:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 09:09	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 09:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 09:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 09:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 09:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 09:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 09:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/20 09:09	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 09:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 09:09	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 09:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 09:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 09:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 09:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 09:09	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 09:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 09:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 09:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 09:09	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 09:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 09:09	1

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

Lab Sample ID: MB 400-473735/4
Matrix: Water
Analysis Batch: 473735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 09:09	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 09:09	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 09:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 09:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 09:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 09:09	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 09:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 09:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 09:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 09:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 09:09	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 09:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 09:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 09:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 09:09	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 09:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*01/13/20 09:09*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*01/13/20 09:09*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*01/13/20 09:09*	*1*

Lab Sample ID: LCS 400-473735/1002
Matrix: Water
Analysis Batch: 473735

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	231		ug/L		115	43 - 160
Acrolein	500	582		ug/L		116	38 - 160
Acrylonitrile	500	636		ug/L		127	64 - 142
Benzene	50.0	58.3		ug/L		117	70 - 130
Bromobenzene	50.0	60.0		ug/L		120	70 - 132
Bromochloromethane	50.0	57.7		ug/L		115	70 - 130
Bromodichloromethane	50.0	56.9		ug/L		114	67 - 133
Bromoform	50.0	51.9		ug/L		104	57 - 140
Bromomethane	50.0	83.1	*	ug/L		166	10 - 160
2-Butanone (MEK)	200	234		ug/L		117	61 - 145
Carbon disulfide	50.0	52.0		ug/L		104	61 - 137
Carbon tetrachloride	50.0	53.9		ug/L		108	61 - 137
Chlorobenzene	50.0	58.9		ug/L		118	70 - 130
Dibromochloromethane	50.0	48.7		ug/L		97	67 - 135
Chloroethane	50.0	71.8	*	ug/L		144	55 - 141

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

Lab Sample ID: LCS 400-473735/1002
Matrix: Water
Analysis Batch: 473735

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	72.0		ug/L		144	10 - 160
Chloroform	50.0	60.1		ug/L		120	69 - 130
1-Chlorohexane	50.0	61.9		ug/L		124	69 - 130
Chloromethane	50.0	68.3		ug/L		137	58 - 137
cis-1,2-Dichloroethene	50.0	63.0		ug/L		126	68 - 130
cis-1,3-Dichloropropene	50.0	56.5		ug/L		113	69 - 132
1,2-Dichlorobenzene	50.0	59.3		ug/L		119	67 - 130
1,3-Dichlorobenzene	50.0	61.3		ug/L		123	70 - 130
1,4-Dichlorobenzene	50.0	60.2		ug/L		120	70 - 130
Dichlorodifluoromethane	50.0	62.0		ug/L		124	41 - 146
1,1-Dichloroethane	50.0	62.6		ug/L		125	70 - 130
1,2-Dichloroethane	50.0	64.4		ug/L		129	69 - 130
1,1-Dichloroethene	50.0	60.0		ug/L		120	63 - 134
1,2-Dichloropropane	50.0	62.3		ug/L		125	70 - 130
1,3-Dichloropropane	50.0	54.0		ug/L		108	70 - 130
2,2-Dichloropropane	50.0	53.6		ug/L		107	52 - 135
1,1-Dichloropropene	50.0	57.8		ug/L		116	70 - 130
Ethylbenzene	50.0	56.9		ug/L		114	70 - 130
Ethyl methacrylate	50.0	51.0		ug/L		102	68 - 130
Hexachlorobutadiene	50.0	72.9	*	ug/L		146	53 - 140
2-Hexanone	200	218		ug/L		109	65 - 137
Isopropylbenzene	50.0	60.0		ug/L		120	70 - 130
Methylene bromide	50.0	59.1		ug/L		118	70 - 130
Methylene Chloride	50.0	60.5		ug/L		121	66 - 135
4-Methyl-2-pentanone (MIBK)	200	242		ug/L		121	69 - 138
Methyl tert-butyl ether	50.0	57.5		ug/L		115	66 - 130
m-Xylene & p-Xylene	50.0	56.9		ug/L		114	70 - 130
Naphthalene	50.0	55.7		ug/L		111	47 - 149
n-Butylbenzene	50.0	55.5		ug/L		111	67 - 130
N-Propylbenzene	50.0	56.5		ug/L		113	70 - 130
o-Chlorotoluene	50.0	54.0		ug/L		108	70 - 130
o-Xylene	50.0	57.4		ug/L		115	70 - 130
p-Chlorotoluene	50.0	57.0		ug/L		114	70 - 130
p-Isopropyltoluene	50.0	58.3		ug/L		117	65 - 130
sec-Butylbenzene	50.0	57.4		ug/L		115	66 - 130
Styrene	50.0	58.4		ug/L		117	70 - 130
tert-Butylbenzene	50.0	55.0		ug/L		110	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.3		ug/L		113	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.8		ug/L		112	70 - 131
Tetrachloroethene	50.0	57.6		ug/L		115	65 - 130
Toluene	50.0	54.0		ug/L		108	70 - 130
trans-1,2-Dichloroethene	50.0	58.9		ug/L		118	70 - 130
trans-1,3-Dichloropropene	50.0	49.5		ug/L		99	63 - 130
1,2,3-Trichlorobenzene	50.0	66.6		ug/L		133	60 - 138
1,2,4-Trichlorobenzene	50.0	65.8		ug/L		132	60 - 140
1,1,1-Trichloroethane	50.0	54.5		ug/L		109	68 - 130
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	70 - 130
Trichloroethene	50.0	64.2		ug/L		128	70 - 130
Trichlorofluoromethane	50.0	66.0		ug/L		132	65 - 138

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

Lab Sample ID: LCS 400-473735/1002
Matrix: Water
Analysis Batch: 473735

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	56.9		ug/L		114	70 - 130
1,2,4-Trimethylbenzene	50.0	57.8		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	50.0	57.3		ug/L		115	69 - 130
Vinyl acetate	100	121		ug/L		121	26 - 160
Vinyl chloride	50.0	66.9		ug/L		134	59 - 136
Xylenes, Total	100	114		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*78 - 118*
Dibromofluoromethane	*97*		*81 - 121*
Toluene-d8 (Surr)	*88*		*80 - 120*

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
Benzenethiol	ND		10	1.7	ug/L		01/10/20 17:35	01/15/20 13:59	1
Benzoic acid	ND		30	7.3	ug/L		01/10/20 17:35	01/15/20 13:59	1
Benzyl alcohol	ND		10	2.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/10/20 17:35	01/15/20 13:59	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/10/20 17:35	01/15/20 13:59	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/10/20 17:35	01/15/20 13:59	1
Bis(2-ethylhexyl) phthalate	6.53	J	10	5.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/10/20 17:35	01/15/20 13:59	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Chloroaniline	ND		10	3.4	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Chlorophenol	ND		10	2.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Dibenzofuran	ND		10	0.52	ug/L		01/10/20 17:35	01/15/20 13:59	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Diethyl phthalate	ND		10	0.70	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/10/20 17:35	01/15/20 13:59	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/10/20 17:35	01/15/20 13:59	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/10/20 17:35	01/15/20 13:59	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/10/20 17:35	01/15/20 13:59	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/10/20 17:35	01/15/20 13:59	1
1,4-Dioxane	ND		10	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/10/20 17:35	01/15/20 13:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/10/20 17:35	01/15/20 13:59	1
Hexachloroethane	ND		10	4.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
Indene	ND		10	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Isophorone	ND		10	0.57	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Methylphenol	ND		10	1.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Nitroaniline	ND		10	2.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
3-Nitroaniline	ND		10	1.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Nitroaniline	ND		10	2.5	ug/L		01/10/20 17:35	01/15/20 13:59	1
Nitrobenzene	ND		10	0.55	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Nitrophenol	ND		10	0.65	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Nitrophenol	ND		10	2.1	ug/L		01/10/20 17:35	01/15/20 13:59	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/10/20 17:35	01/15/20 13:59	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/10/20 17:35	01/15/20 13:59	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/10/20 17:35	01/15/20 13:59	1
Pentachlorophenol	ND		20	1.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
Phenol	ND		10	2.6	ug/L		01/10/20 17:35	01/15/20 13:59	1
Pyridine	ND		10	3.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
Quinoline	ND		10	6.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/10/20 17:35	01/15/20 13:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*34 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
2-Fluorophenol	*41*		*10 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
Phenol-d5	*62*		*10 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
Terphenyl-d14	*70*		*53 - 125*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
2,4,6-Tribromophenol	*44*		*15 - 135*	*01/10/20 17:35*	*01/15/20 13:59*	*1*

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	21.9		ug/L		73	29 - 120
Benzoic acid	117	40.3		ug/L		35	10 - 150
Benzyl alcohol	30.0	25.2		ug/L		84	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.8		ug/L		79	45 - 120
Bis(2-chloroethyl)ether	30.0	24.8		ug/L		83	48 - 120
bis (2-chloroisopropyl) ether	30.0	24.2		ug/L		81	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	30.5	B	ug/L		102	48 - 150
4-Bromophenyl phenyl ether	30.0	23.7		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	28.8		ug/L		96	46 - 145
4-Chloroaniline	30.0	19.1		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	25.1		ug/L		84	39 - 140

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

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	24.2		ug/L		81	52 - 120
2-Chlorophenol	30.0	21.6		ug/L		72	34 - 120
4-Chlorophenyl phenyl ether	30.0	26.5		ug/L		88	58 - 124
Dibenz[a,h]acridine	30.0	23.1		ug/L		77	46 - 149
Dibenzofuran	30.0	26.8		ug/L		89	58 - 123
3,3'-Dichlorobenzidine	40.0	31.5		ug/L		79	39 - 135
2,4-Dichlorophenol	30.0	23.6		ug/L		79	39 - 128
Diethyl phthalate	30.0	28.8		ug/L		96	44 - 146
2,4-Dimethylphenol	30.0	25.1		ug/L		84	44 - 120
Dimethyl phthalate	30.0	27.5		ug/L		92	50 - 131
Di-n-butyl phthalate	30.0	30.7		ug/L		102	55 - 131
4,6-Dinitro-ortho-cresol	60.0	18.6		ug/L		31	10 - 150
2,4-Dinitrophenol	60.0	13.1	J	ug/L		22	10 - 150
2,4-Dinitrotoluene	30.0	26.7		ug/L		89	58 - 140
2,6-Dinitrotoluene	30.0	26.8		ug/L		89	57 - 130
Di-n-octyl phthalate	30.0	28.4		ug/L		95	50 - 150
1,4-Dioxane	30.0	20.0		ug/L		67	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.9		ug/L		80	47 - 123
Hexachlorobenzene	30.0	26.0		ug/L		87	52 - 131
Hexachlorocyclopentadiene	30.0	8.69	J	ug/L		29	10 - 129
Hexachloroethane	30.0	12.3		ug/L		41	20 - 120
Indene	30.0	19.5		ug/L		65	47 - 120
Isophorone	30.0	24.6		ug/L		82	49 - 120
2-Methylphenol	30.0	24.0		ug/L		80	39 - 123
3 & 4 Methylphenol	30.0	25.0		ug/L		83	38 - 121
2-Nitroaniline	30.0	28.6		ug/L		95	47 - 150
3-Nitroaniline	30.0	26.3		ug/L		88	34 - 132
4-Nitroaniline	30.0	33.9		ug/L		113	41 - 135
Nitrobenzene	30.0	23.5		ug/L		78	47 - 120
2-Nitrophenol	30.0	22.2		ug/L		74	28 - 136
4-Nitrophenol	60.0	45.3		ug/L		75	10 - 150
N-Nitrosodimethylamine	30.0	23.7		ug/L		79	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.9		ug/L		83	44 - 120
N-Nitrosodiphenylamine	29.8	23.7		ug/L		80	56 - 120
Pentachlorophenol	60.0	25.6		ug/L		43	15 - 141
Phenol	30.0	22.5		ug/L		75	33 - 120
Pyridine	60.0	42.0		ug/L		70	26 - 120
Quinoline	30.0	26.1		ug/L		87	51 - 129
2,4,5-Trichlorophenol	30.0	26.4		ug/L		88	38 - 147
2,4,6-Trichlorophenol	30.0	25.9		ug/L		86	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*77*		*10 - 120*
Terphenyl-d14	*92*		*53 - 125*

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

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	*89*		*15 - 135*

Lab Sample ID: LCS 400-473677/4-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

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	*57*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*75*		*27 - 120*
Phenol-d5	*62*		*10 - 120*
Terphenyl-d14	*79*		*53 - 125*
2,4,6-Tribromophenol	*27*		*15 - 135*

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	23.9		ug/L		80	29 - 120	9	30
Benzoic acid	117	23.4	J *	ug/L		20	10 - 150	53	30
Benzyl alcohol	30.0	26.8		ug/L		89	19 - 125	6	30
Bis(2-chloroethoxy)methane	30.0	25.0		ug/L		83	45 - 120	5	30
Bis(2-chloroethyl)ether	30.0	26.1		ug/L		87	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	25.5		ug/L		85	30 - 125	5	30
Bis(2-ethylhexyl) phthalate	30.0	47.1	*	ug/L		157	48 - 150	43	30
4-Bromophenyl phenyl ether	30.0	25.6		ug/L		85	55 - 122	8	30
Butyl benzyl phthalate	30.0	31.5		ug/L		105	46 - 145	9	30
4-Chloroaniline	30.0	20.5		ug/L		68	30 - 120	7	30
4-Chloro-3-methylphenol	30.0	26.0		ug/L		87	39 - 140	3	30
2-Chloronaphthalene	30.0	26.2		ug/L		87	52 - 120	8	30
2-Chlorophenol	30.0	22.9		ug/L		76	34 - 120	6	30
4-Chlorophenyl phenyl ether	30.0	28.3		ug/L		94	58 - 124	7	30
Dibenz[a,h]acridine	30.0	25.2		ug/L		84	46 - 149	9	30
Dibenzofuran	30.0	28.6		ug/L		95	58 - 123	6	30
3,3'-Dichlorobenzidine	40.0	35.2		ug/L		88	39 - 135	11	30
2,4-Dichlorophenol	30.0	24.6		ug/L		82	39 - 128	4	30
Diethyl phthalate	30.0	31.1		ug/L		104	44 - 146	8	30
2,4-Dimethylphenol	30.0	26.0		ug/L		87	44 - 120	4	30
Dimethyl phthalate	30.0	29.6		ug/L		99	50 - 131	7	30
Di-n-butyl phthalate	30.0	32.5		ug/L		108	55 - 131	6	30
4,6-Dinitro-ortho-cresol	60.0	24.1		ug/L		40	10 - 150	26	30
2,4-Dinitrophenol	60.0	19.5	J *	ug/L		32	10 - 150	39	30
2,4-Dinitrotoluene	30.0	29.6		ug/L		99	58 - 140	10	30
2,6-Dinitrotoluene	30.0	29.6		ug/L		99	57 - 130	10	30

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

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	30.7		ug/L		102	50 - 150	8	30
1,4-Dioxane	30.0	21.4		ug/L		71	25 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.5		ug/L		85	47 - 123	7	30
Hexachlorobenzene	30.0	28.1		ug/L		94	52 - 131	8	30
Hexachlorocyclopentadiene	30.0	9.60	J	ug/L		32	10 - 129	10	30
Hexachloroethane	30.0	14.5		ug/L		48	20 - 120	16	30
Indene	30.0	21.3		ug/L		71	47 - 120	9	30
Isophorone	30.0	25.8		ug/L		86	49 - 120	5	30
2-Methylphenol	30.0	24.9		ug/L		83	39 - 123	3	30
3 & 4 Methylphenol	30.0	26.4		ug/L		88	38 - 121	5	30
2-Nitroaniline	30.0	31.1		ug/L		104	47 - 150	9	30
3-Nitroaniline	30.0	28.4		ug/L		95	34 - 132	8	30
4-Nitroaniline	30.0	36.0		ug/L		120	41 - 135	6	30
Nitrobenzene	30.0	24.8		ug/L		83	47 - 120	5	30
2-Nitrophenol	30.0	22.9		ug/L		76	28 - 136	3	30
4-Nitrophenol	60.0	43.4		ug/L		72	10 - 150	4	30
N-Nitrosodimethylamine	30.0	25.3		ug/L		84	22 - 148	7	30
N-Nitrosodi-n-propylamine	30.0	26.3		ug/L		88	44 - 120	5	30
N-Nitrosodiphenylamine	29.8	25.7		ug/L		86	56 - 120	8	30
Pentachlorophenol	60.0	30.8		ug/L		51	15 - 141	19	30
Phenol	30.0	24.0		ug/L		80	33 - 120	7	30
Pyridine	60.0	43.9		ug/L		73	26 - 120	4	30
Quinoline	30.0	27.4		ug/L		91	51 - 129	5	30
2,4,5-Trichlorophenol	30.0	27.7		ug/L		92	38 - 147	5	30
2,4,6-Trichlorophenol	30.0	27.5		ug/L		92	36 - 139	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*67*		*10 - 120*
Nitrobenzene-d5	*86*		*27 - 120*
Phenol-d5	*83*		*10 - 120*
Terphenyl-d14	*100*		*53 - 125*
2,4,6-Tribromophenol	*99*		*15 - 135*

Lab Sample ID: LCSD 400-473677/5-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*57*		*10 - 120*
Nitrobenzene-d5	*72*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*

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

Lab Sample ID: LCSD 400-473677/5-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	47		15 - 135

Lab Sample ID: MB 400-476444/1-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		02/03/20 11:34	02/06/20 23:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	57		34 - 120	02/03/20 11:34	02/06/20 23:53	1
2-Fluorophenol	57		10 - 120	02/03/20 11:34	02/06/20 23:53	1
Nitrobenzene-d5	76		27 - 120	02/03/20 11:34	02/06/20 23:53	1
Phenol-d5	65		10 - 120	02/03/20 11:34	02/06/20 23:53	1
Terphenyl-d14	77		53 - 125	02/03/20 11:34	02/06/20 23:53	1
2,4,6-Tribromophenol	51		15 - 135	02/03/20 11:34	02/06/20 23:53	1

Lab Sample ID: LCS 400-476444/2-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	30.0	28.7		ug/L		96	48 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	52		34 - 120
2-Fluorophenol	57		10 - 120
Nitrobenzene-d5	80		27 - 120
Phenol-d5	64		10 - 120
Terphenyl-d14	63		53 - 125
2,4,6-Tribromophenol	51		15 - 135

Lab Sample ID: LCSD 400-476444/3-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	30.0	22.8		ug/L		76	48 - 150	23	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	55		34 - 120
2-Fluorophenol	58		10 - 120
Nitrobenzene-d5	85		27 - 120
Phenol-d5	68		10 - 120
Terphenyl-d14	67		53 - 125
2,4,6-Tribromophenol	53		15 - 135

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Anthracene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Chrysene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Fluoranthene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Fluorene	ND		0.20	0.021	ug/L		01/10/20 17:35	01/16/20 13:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Phenanthrene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Pyrene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*126*		*33 - 138*	*01/10/20 17:35*	*01/16/20 13:25*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*01/10/20 17:35*	*01/16/20 13:25*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*01/10/20 17:35*	*01/16/20 13:25*	*1*

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	26.5		ug/L		88	41 - 120
Acenaphthylene	30.0	23.6		ug/L		79	44 - 120
Anthracene	30.0	24.9		ug/L		83	49 - 120
Benzo[a]anthracene	30.0	26.7		ug/L		89	61 - 135
Benzo[a]pyrene	30.0	25.1		ug/L		84	52 - 120
Benzo[b]fluoranthene	30.0	30.6		ug/L		102	53 - 134
Benzo[g,h,i]perylene	30.0	18.9		ug/L		63	47 - 133
Benzo[k]fluoranthene	30.0	29.6		ug/L		99	57 - 134
Chrysene	30.0	25.9		ug/L		86	55 - 122
Dibenz(a,h)anthracene	30.0	23.0		ug/L		77	48 - 146
Fluoranthene	30.0	26.1		ug/L		87	54 - 128
Fluorene	30.0	29.3		ug/L		98	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	21.7		ug/L		72	43 - 142
Phenanthrene	30.0	25.5		ug/L		85	48 - 120
Pyrene	30.0	25.7		ug/L		86	48 - 132
1-Methylnaphthalene	30.0	20.7		ug/L		69	41 - 120
2-Methylnaphthalene	30.0	18.7		ug/L		62	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*103*		*33 - 138*

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

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	80		15 - 122
Nitrobenzene-d5	93		19 - 130

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	23.6		ug/L		79	41 - 120	12	56
Acenaphthylene	30.0	21.5		ug/L		72	44 - 120	9	56
Anthracene	30.0	23.6		ug/L		79	49 - 120	5	51
Benzo[a]anthracene	30.0	25.1		ug/L		84	61 - 135	6	49
Benzo[a]pyrene	30.0	23.9		ug/L		80	52 - 120	5	50
Benzo[b]fluoranthene	30.0	29.3		ug/L		98	53 - 134	4	54
Benzo[g,h,i]perylene	30.0	17.6		ug/L		59	47 - 133	7	50
Benzo[k]fluoranthene	30.0	27.6		ug/L		92	57 - 134	7	52
Chrysene	30.0	24.6		ug/L		82	55 - 122	5	50
Dibenz(a,h)anthracene	30.0	20.9		ug/L		70	48 - 146	10	50
Fluoranthene	30.0	24.4		ug/L		81	54 - 128	7	52
Fluorene	30.0	24.7		ug/L		82	45 - 125	17	56
Indeno[1,2,3-cd]pyrene	30.0	20.6		ug/L		69	43 - 142	5	51
Phenanthrene	30.0	23.8		ug/L		79	48 - 120	7	56
Pyrene	30.0	24.7		ug/L		82	48 - 132	4	52
1-Methylnaphthalene	30.0	21.3		ug/L		71	41 - 120	3	55
2-Methylnaphthalene	30.0	19.6		ug/L		65	32 - 124	4	57

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	97		33 - 138
2-Fluorobiphenyl	70		15 - 122
Nitrobenzene-d5	88		19 - 130

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-473548/1-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473548

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		01/10/20 09:28	01/10/20 20:07	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/10/20 09:28	01/10/20 20:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	74		51 - 149	01/10/20 09:28	01/10/20 20:07	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-473548/2-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.134		ug/L		134	60 - 140
1,2-Dibromoethane	0.100	0.0859		ug/L		86	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*73*		*51 - 149*

Lab Sample ID: LCSD 400-473548/3-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473548

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.196	*	ug/L		196	60 - 140	39	30
1,2-Dibromoethane	0.100	0.117	*	ug/L		117	60 - 140	34	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*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 # 1364580 (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 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/8/20
PAGE: 1 of 1

EXPLORATION COMPANY: AECOM
DGO CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60619901 - 1.03.001 / 60619901 - 1.03.0011

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 #'s

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): James Ragatz, Ben Berleson
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

400-182302 COC

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

☑ 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 - 1.03.001: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0011: VOC 8011	PAH 8270LL
	TB-ROX-010820-8260-BP	1/8/20	0000	Water	2					2	2			
	TB-ROX-010820-8011-BP	1/8/20	0000	H2O	2					2			2	
	MW23-ROX-010820	1/8/20	1315	H2O	4			2		6	2	1	2	1

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
James Ragatz	1275 8885 6635 1275 8885 6613	1/8/2020	1600
	Fedex: 1275 8885 6624 1275 8885 6602		
		1-9-20	9:36

Version: 14Dec19

Custody Seal #s: 1197536, 1197537, 1197538, 1197539
1197540, 1197541, 1197542, 1197543
1.5°, 0.2°, 2.9°, 1.6°, NR

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2/19/2020 (Rev. 2)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182302-1

Login Number: 182302
List Number: 1
Creator: Conrady, Hank W

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	1.5°C 0.2°C 2.9°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: 400-182302-1
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	02-22-20
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	200041	10-09-19 *
Illinois	NELAP	004586	10-09-19 *
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	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182304-1-Rev. 2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 3/1/2020

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

Sample Identification	Sample Identification
TB-ROX-010820-8260-A	TB-ROX-010820-8011-A
MW6A-ROX-010820	MW6B-ROX-010820
MW6C-ROX-010820	MW6D-ROX-010820
TB-ROX-010820-8260-B	TB-ROX-010820-8011-B
P93C-ROX-010820-EB	P93C-ROX-010820
P93D-ROX-010820	P93B-ROX-010820
P93B-ROX-010820-Dup	P56-ROX-010820
P74-ROX-010820	

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, laboratory case narrative indicated bis(2-ethylhexyl) phthalate was detected in the method blank, and although not indicated in the laboratory case narrative, PAHs were detected in equipment blank P93C-ROX-010820-EB. Several VOC, SVOC, 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 several investigative and quality control samples. Several VOC, SVOC, and VOC by 8011 MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW6A-ROX-010820. The SVOC internal standard recovery for chrysene-d_{12} was outside criteria in the continuing calibration verification. The difference in phenol results for the field duplicate pair P93B-ROX-010820/P93B-ROX-010820-Dup was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (J). Field duplicate pair P93B-ROX-010820/P93B-ROX-010820-Dup was diluted to bring VOCs and phenol into calibration range of the instrument. The continuing calibration verifications for hexachlorocyclopentadiene and quinoline were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised to include re-analysis of pentachlorophenol in sample MW6B-ROX-010820, and to correctly report samples MW6D-ROX-010820 and P56-ROX-010820 in which results had previously been switched by the laboratory due to incorrect laboratory ID labels; 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?

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-473677/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	6.53 µg/L
P93C-ROX-010820-EB	PAHs	1-Methylnaphthalene	0.094 µg/L
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 400-473735/1002	VOCs	Bromomethane	**166**	NA	10-160
LCS 400-473735/1002	VOCs	Chloroethane	**144**	NA	55-141
LCS 400-473735/1002	VOCs	Hexachlorobutadiene	**146**	NA	53-140
LCS/LCSD 400-473677/2-A/3-A	SVOCs	Benzoic acid	35/20	**53**	10-150/30
LCS/LCSD 400-473677/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	102/**157**	**43**	48-150/30
LCS/LCSD 400-473677/2-A/3-A	SVOCs	2,4-Dinitrophenol	22/32	**39**	10-150/30
LCS/LCSD 400-473677/4-A/5-A	SVOCs	Benzenethiol	**2/2**	9	10-120/30
LCS/LCSD 400-473548/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	134/**196**	**39**	60-140/30
LCS/LCSD 400-473548/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	86/117	**34**	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
MW6A-ROX-010820	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-010820	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-010820	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93C-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93D-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93B-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93B-ROX-010820-Dup	SVOCs	Benzenethiol	**UJ**
P56-ROX-010820	SVOCs	Benzenethiol	**UJ**
P74-ROX-010820	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6A-ROX-010820	SVOCs	2-Fluorophenol	**2**	10-120
MW6A-ROX-010820	SVOCs	Nitrobenzene-d_5	**18**	27-120
P93D-ROX-010820	PAHs	Terphenyl-d_{14}	**142**	33-138
P93D-ROX-010820	SVOCs	2-Fluorophenol	**4**	10-120
P93D-ROX-010820	SVOCs	2,4,6-Tribromophenol	**11**	15-135
P93B-ROX-010820	SVOCs	Terphenyl-d_{14}	**50**	53-125
P93B-ROX-010820-Dup	SVOCs	2-Fluorobiphenyl	**32**	34-120
P93B-ROX-010820-Dup	SVOCs	Terphenyl-d_{14}	**39**	53-125
MW6A-ROX-010820 MSD	SVOCs	2-Fluorophenol	**0.2**	10-120
MW6A-ROX-010820 MSD	SVOCs	Nitrobenzene-d_5	**3**	27-120
MW6A-ROX-010820 MSD	SVOCs	Phenol-d_5	**2**	10-120
MW6A-ROX-010820 MSD	SVOCs	Terphenyl-d_{14}	**50**	53-125
MW6A-ROX-010820 MSD	SVOCs	2,4,6-Tribromophenol	**0**	15-135
MW6A-ROX-010820 MSD	PAHs	Nitrobenzene-d_5	**3**	19-130

Analytical data that required qualification based on surrogate data are included in the table below. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. 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.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-010820	SVOCs	Benzoic acid	**UJ**
P93D-ROX-010820	SVOCs	Benzyl alcohol	**UJ**

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-010820	SVOCs	4-Chloro-3-methylphenol	UJ
P93D-ROX-010820	SVOCs	2-Chlorophenol	UJ
P93D-ROX-010820	SVOCs	2,4-Dichlorophenol	UJ
P93D-ROX-010820	SVOCs	2,4-Dimethylphenol	UJ
P93D-ROX-010820	SVOCs	2,4-Dinitrophenol	UJ
P93D-ROX-010820	SVOCs	2-Methylphenol	UJ
P93D-ROX-010820	SVOCs	3&4-Methylphenol	UJ
P93D-ROX-010820	SVOCs	2-Nitrophenol	UJ
P93D-ROX-010820	SVOCs	4-Nitrophenol	UJ
P93D-ROX-010820	SVOCs	Pentachlorophenol	UJ
P93D-ROX-010820	SVOCs	Phenol	UJ
P93D-ROX-010820	SVOCs	2,4,5-Trichlorophenol	UJ
P93D-ROX-010820	SVOCs	2,4,6-Trichlorophenol	UJ
P93B-ROX-010820-Dup	SVOCs	Aniline	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Chloroethoxy) methane	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Chloroethyl) ether	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Chloroisopropyl) ether	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Ethylhexyl) phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	4-Bromophenyl phenyl ether	UJ
P93B-ROX-010820-Dup	SVOCs	Butyl benzyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	4-Chloroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	2-Chloronaphthalene	UJ
P93B-ROX-010820-Dup	SVOCs	4-Chlorophenyl phenyl ether	UJ
P93B-ROX-010820-Dup	SVOCs	Dibenz[a,h]acridine	UJ
P93B-ROX-010820-Dup	SVOCs	Dibenzofuran	UJ
P93B-ROX-010820-Dup	SVOCs	3,3'-Dichlorobenzidine	UJ
P93B-ROX-010820-Dup	SVOCs	Diethyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	Dimethyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	Di-n-butyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P93B-ROX-010820-Dup	SVOCs	2,4-Dinitrotoluene	UJ
P93B-ROX-010820-Dup	SVOCs	2,6-Dinitrotoluene	UJ
P93B-ROX-010820-Dup	SVOCs	Di-n-octyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	1,4-Dioxane	UJ
P93B-ROX-010820-Dup	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	UJ
P93B-ROX-010820-Dup	SVOCs	Hexachlorobenzene	UJ
P93B-ROX-010820-Dup	SVOCs	Hexachlorocyclopentadiene	UJ
P93B-ROX-010820-Dup	SVOCs	Hexachloroethane	UJ
P93B-ROX-010820-Dup	SVOCs	Indene	UJ
P93B-ROX-010820-Dup	SVOCs	Isophorone	UJ
P93B-ROX-010820-Dup	SVOCs	2-Nitroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	3-Nitroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	4-Nitroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	Nitrobenzene	UJ
P93B-ROX-010820-Dup	SVOCs	n-Nitrosodimethylamine	UJ

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-010820-Dup	SVOCs	n-Nitrosodi-n-propylamine	**UJ**
P93B-ROX-010820-Dup	SVOCs	n-Nitrosodiphenylamine	**UJ**
P93B-ROX-010820-Dup	SVOCs	Pyridine	**UJ**
P93B-ROX-010820-Dup	SVOCs	Quinoline	**UJ**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW6A-ROX-010820 was spiked and duplicated for Method 8260 VOCs, Method 8011 VOCs, and Method 8270 SVOCs/PAHs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6A-ROX-010820	VOCs	Bromomethane	**165**/138	18	10-150/50
MW6A-ROX-010820	VOCs	2-Chloroethyl vinyl ether	10/**0**	**NC**	10-150/50
MW6A-ROX-010820	VOCs	Hexachlorobutadiene	**151**/130	15	31-149/36
MW6A-ROX-010820	SVOCs	Aniline	35/**0**	**NC**	10-143/63
MW6A-ROX-010820	SVOCs	Benzoic acid	99/**0**	**NC**	10-134/49
MW6A-ROX-010820	SVOCs	Benzyl alcohol	75/40	**61**	10-154/37
MW6A-ROX-010820	SVOCs	bis(2-Chloroethyl) ether	70/44	**47**	28-130/42
MW6A-ROX-010820	SVOCs	bis(2-Ethylhexyl) phthalate	115/**17**	**149**	43-160/35
MW6A-ROX-010820	SVOCs	Butyl benzyl phthalate	76/**7**	**169**	43-151/32
MW6A-ROX-010820	SVOCs	4-Chloroaniline	39/**0**	**NC**	10-152/94
MW6A-ROX-010820	SVOCs	4-Chloro-3-methylphenol	66/**0**	**NC**	17-156/40
MW6A-ROX-010820	SVOCs	2-Chlorophenol	63/**0**	**NC**	19-130/42
MW6A-ROX-010820	SVOCs	3,3'-Dichlorobenzidine	**0/0**	**NC**	10-172/58
MW6A-ROX-010820	SVOCs	2,4-Dichlorophenol	63/**0**	**NC**	16-147/43
MW6A-ROX-010820	SVOCs	Diethyl phthalate	71/**5**	**172**	23-160/40
MW6A-ROX-010820	SVOCs	2,4-Dimethylphenol	71/38	**61**	25-146/47
MW6A-ROX-010820	SVOCs	Dimethyl phthalate	65/**0**	**NC**	11-158/36
MW6A-ROX-010820	SVOCs	Di-n-butyl phthalate	79/**12**	**150**	28-162/32
MW6A-ROX-010820	SVOCs	4,6-Dinitro-ortho-cresol	92/**0**	**NC**	10-168/42
MW6A-ROX-010820	SVOCs	2,4-Dinitrophenol	106/**0**	**NC**	10-166/36
MW6A-ROX-010820	SVOCs	2,4-Dinitrotoluene	64/**0**	**NC**	26-158/28
MW6A-ROX-010820	SVOCs	2,6-Dinitrotoluene	65/**0**	**NC**	19-157/28
MW6A-ROX-010820	SVOCs	Di-n-octyl phthalate	81/**11**	**152**	42-150/35
MW6A-ROX-010820	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	76/27	**95**	19-162/40
MW6A-ROX-010820	SVOCs	Hexachlorobenzene	77/**40**	**65**	45-145/33
MW6A-ROX-010820	SVOCs	Hexachlorocyclopentadiene	50/**0**	**NC**	10-151/50
MW6A-ROX-010820	SVOCs	Hexachloroethane	67/**0**	**NC**	29-130/41
MW6A-ROX-010820	SVOCs	Indene	53/28	**63**	22-130/40
MW6A-ROX-010820	SVOCs	Isophorone	63/119	**60**	24-144/33

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6A-ROX-010820	SVOCs	2-Methylphenol	71/**14**	**135**	22-130/47
MW6A-ROX-010820	SVOCs	3&4-Methylphenol	72/**11**	**146**	31-130/47
MW6A-ROX-010820	SVOCs	2-Nitroaniline	79/**0**	**NC**	10-162/33
MW6A-ROX-010820	SVOCs	3-Nitroaniline	53/**0**	**NC**	10-163/39
MW6A-ROX-010820	SVOCs	4-Nitroaniline	89/**0**	**NC**	10-162/50
MW6A-ROX-010820	SVOCs	Nitrobenzene	64/**3**	**184**	34-135/35
MW6A-ROX-010820	SVOCs	2-Nitrophenol	69/**0**	**NC**	27-134/43
MW6A-ROX-010820	SVOCs	4-Nitrophenol	97/**0**	**NC**	10-175/82
MW6A-ROX-010820	SVOCs	n-Nitrosodimethylamine	75/**0**	**NC**	10-139/62
MW6A-ROX-010820	SVOCs	n-Nitrosodi-n-propylamine	75/**0**	**NC**	13-147/36
MW6A-ROX-010820	SVOCs	n-Nitrosodiphenylamine	67/**19**	**112**	31-150/34
MW6A-ROX-010820	SVOCs	Pentachlorophenol	96/**4**	**184**	10-180/42
MW6A-ROX-010820	SVOCs	Phenol	71/**0**	**NC**	23-130/52
MW6A-ROX-010820	SVOCs	2,4,5-Trichlorophenol	75/**0**	**NC**	43-137/42
MW6A-ROX-010820	SVOCs	2,4,6-Trichlorophenol	66/**0**	**NC**	42-135/44
MW6A-ROX-010820	VOCs by 8011	1,2-Dibromo-3-chloropropane	**154/164**	1	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. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6A-ROX-010820	SVOCs	Aniline	**UJ**
MW6A-ROX-010820	SVOCs	Benzoic acid	**UJ**
MW6A-ROX-010820	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Butyl benzyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	4-Chloroaniline	**UJ**
MW6A-ROX-010820	SVOCs	4-Chloro-3-methylphenol	**UJ**
MW6A-ROX-010820	SVOCs	2-Chlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW6A-ROX-010820	SVOCs	2,4-Dichlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	Diethyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Dimethyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Di-n-butyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW6A-ROX-010820	SVOCs	2,4-Dinitrophenol	**UJ**
MW6A-ROX-010820	SVOCs	2,4-Dinitrotoluene	**UJ**
MW6A-ROX-010820	SVOCs	2,6-Dinitrotoluene	**UJ**
MW6A-ROX-010820	SVOCs	Di-n-octyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Hexachlorobenzene	**UJ**
MW6A-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	SVOCs	Hexachloroethane	**UJ**
MW6A-ROX-010820	SVOCs	2-Methylphenol	**UJ**
MW6A-ROX-010820	SVOCs	3&4-Methylphenol	**UJ**
MW6A-ROX-010820	SVOCs	2-Nitroaniline	**UJ**
MW6A-ROX-010820	SVOCs	3-Nitroaniline	**UJ**
MW6A-ROX-010820	SVOCs	4-Nitroaniline	**UJ**
MW6A-ROX-010820	SVOCs	Nitrobenzene	**UJ**
MW6A-ROX-010820	SVOCs	2-Nitrophenol	**UJ**
MW6A-ROX-010820	SVOCs	4-Nitrophenol	**UJ**
MW6A-ROX-010820	SVOCs	n-Nitrosodimethylamine	**UJ**
MW6A-ROX-010820	SVOCs	n-Nitrosodi-n-propylamine	**UJ**
MW6A-ROX-010820	SVOCs	n-Nitrosodiphenylamine	**UJ**
MW6A-ROX-010820	SVOCs	Pentachlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	Phenol	**UJ**
MW6A-ROX-010820	SVOCs	2,4,5-Trichlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	2,4,6-Trichlorophenol	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
ICV 400-472769/11	SVOCs	Chrysene-d_{12}	**381274**	417202-1668806

Initial calibration verifications (ICV) are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P93B-ROX-010820	P93B-ROX-010820-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P93B-ROX-010820	P93B-ROX-010820-Dup	SVOCs	Phenol	**> 2X RL**	**J/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for hexachlorocyclopentadiene and quinoline were outside acceptance criteria, biased low, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	SVOCs	Quinoline	**UJ**
MW6B-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6B-ROX-010820	SVOCs	Quinoline	**UJ**
MW6C-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6C-ROX-010820	SVOCs	Quinoline	**UJ**
MW6D-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6D-ROX-010820	SVOCs	Quinoline	**UJ**
P93C-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93C-ROX-010820	SVOCs	Quinoline	**UJ**
P93D-ROX-010820	SVOCs	Quinoline	**UJ**
P93B-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93B-ROX-010820	SVOCs	Quinoline	**UJ**
P56-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P56-ROX-010820	SVOCs	Quinoline	**UJ**
P74-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-010820	SVOCs	Quinoline	**UJ**

1.0 VALIDATION OF DBCP AND EDB DATA – SDG 400-182304-1-R2

This section describes the validation for nine investigative groundwater samples, one field duplicate, one equipment blank and two trip blanks that were prepared and analyzed for 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by USEPA SW-846 Method 8011. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-182304-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010820-8011-A	MW6A-ROX-010820
MW6B-ROX-010820	MW6C-ROX-010820
MW6D-ROX-010820	TB-ROX-010820-8011-B
P93C-ROX-010820-EB	P93C-ROX-010820
P93D-ROX-010820	P93B-ROX-010820
P93B-ROX-010820-DUP	P56-ROX-010820
P74-ROX-010820	--

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2017).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- Initial calibration
- Calibration verification
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results of each analyte requested for each field sample submitted in the analytical batch, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

Yes, laboratory case narrative indicated LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW6A-ROX-010820.

The cooler receipt form did not indicate any issues or discrepancies.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, the raw data forms, and the chromatograms for accuracy, consistency, and holding time compliance. The samples were received in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection. No qualifications to the data were required based on holding times and sample preservation.

1.4 Initial Calibration

An initial calibration (ICAL) was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for EDB/DBCP analyses. Validated samples included in SDG 400-182304-1-R2 were analyzed using instrument Yeti. The ICAL for instrument Yeti was established on 1/10/2020. At least five standard concentrations were used to establish the ICAL curve as required by Method 8011.

Review of the ICAL summary forms indicated percent relative standard deviations (%RSDs) were ≤ 15% for target analytes or were determined using least square linear regression and correlation coefficients (r) were greater than 0.990. A recalculation of the %RSDs was performed from the raw data, and no errors in calculation were noted; therefore, no qualification of data was required.

Review of the sample chromatograms indicated that an initial calibration verification (ICV) was performed following the initial calibration. Review of ICV summary forms indicated percent difference (%D) ≤ 15% for target analytes except for 1,2-dibromo-3-chloropropane (36.2%). Data associated with ICV %D above evaluation criteria indicating a possible high bias was non-detect in the associated samples. No qualification of data was required.

Recalculation of the percent recoveries was completed, and no errors in calculation were noted.

1.5 Calibration Verification

Review of the sample chromatograms indicated that all calibration verifications (CVs) were performed before the start of sample analysis, every ten sample injections, and at the end of sample analysis. Percent differences (%Ds) were within the evaluation criteria of ≤ 15% for target analytes except for 1,2-dibromo-3-chloropropane (82.5%, 57.2%, 41.7%, and 92.6%, respectively). The results in the validated samples associated with increases in response factors and calculated as positive %D, indicating a potential high bias, were non-detect and were not qualified. No qualification of data was required.

Recalculations of the %Ds for target compounds were completed for each CV, and no errors in calculation were noted; therefore, no qualifications of data were required.

1.6 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8011. Also, trip blanks were analyzed to evaluate the existence and magnitude of contamination problems emanating from sample shipment to the laboratory. Equipment blank samples were used to evaluate the efficiency of the decontamination of sampling equipment. Target compounds were reported as non-detect. No qualification of data was required.

1.7 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation criteria with the exceptions in the table below.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-473548/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	134/**196**	**39**	60-140/30
LCS/LCSD 400-473548/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	86/117	**34**	60-140/30

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Additionally, analytical data associated with RPD alone outside evaluation criteria did not require qualification. No qualification of data was required.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.8 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples.

Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.9 Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW6A-ROX-010820 was spiked and analyzed for Method 8011 VOCs. MS/MSD recoveries were within evaluation criteria with the exception summarized in the table below.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6A-ROX-010820	VOCs by 8011	1,2-Dibromo-3-chloropropane	**154/164**	1	65-135/20

Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. No qualification of data was required.

Approximately 10% of the recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted; therefore. No qualification of data was required.

1.10 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Approximately 10% of the detected target analytes were verified. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, the matrix spike results were recalculated from the raw data since all target analytes in investigative samples were non-detect, and no calculation errors were noted. Additionally, the reporting limits were verified to determine if reporting limits (RLs) were adjusted for dilutions. No qualification of the data was required, and review of the data indicated the correct RLs were reported.

1.11 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS and surrogate data were achieved for this SDG.

1.0 VALIDATION OF VOC DATA – SDG 400-182304-1-R2

This section describes the validation for nine investigative groundwater samples, one field duplicate, one equipment blank and two trip blanks which were prepared by USEPA SW-846 Method 5030B and analyzed for volatile organic compounds (VOCs) by USEPA SW-846 Method 8260B. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-182304-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-010820-8260-A	MW6A-ROX-010820
MW6B-ROX-010820	MW6C-ROX-010820
MW6D-ROX-010820	TB-ROX-010820-8260-B
P93C-ROX-010820-EB	P93C-ROX-010820
P93D-ROX-010820	P93B-ROX-010820
P93B-ROX-010820-DUP	P56-ROX-010820
P74-ROX-010820	--

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2017).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain that it contained the data contractually required in the deliverable. This included checking the data package for the results of each

analyte requested for each field sample submitted in the analytical batch, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that several VOC LCS/LCSD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several VOC MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW6A-ROX-010820. These issues are addressed further in the appropriate sections of this validation report.

Additionally, the laboratory case narrative indicated three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative. VOCs in samples P93C-ROX-011019 and T12-ROX-011019 were diluted to bring target analyte concentrations within calibration range. Analytes were detected in diluted samples; no qualification of data was required.

No issues or discrepancies were noted in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, the raw data forms, and the chromatograms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection at a pH < 2. No qualifications to the data were required based on holding times and sample preservation.

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against criteria established in USEPA SW-846 Method 8260.

Based on the summary forms, the ion abundance criteria were within evaluation criteria for all masses. No qualifications to the data were required based on instrument performance criteria.

1.5 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for volatiles analyses. Validated samples included in SDG 400-182304-1-R2 were analyzed using instrument CH_LARS and Rosalind. The ICAL for instrument CH_LARS and Rosalind were established on 11/20/2019. At least five standard concentrations were used to establish the ICAL curves as required by Method 8260B.

The ICAL response factors (RFs) were reviewed and were greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, 0.30 for 1,1,2,2-tetrachloroethane, and greater than National Functional Guideline (NFG) specified minimum RRFs for all other target analytes. No qualification of data was required.

Review of the initial calibration summary forms indicated %RSDs were $\leq$ 30% for calibration check compounds (CCCs) [1,1-dichloroethene, toluene, chloroform, ethylbenzene, 1,2-dichloropropane, and vinyl chloride], and $\leq$ 15% for non-CCCs with some exceptions. The

initial calibration for compounds with %RSD values outside evaluation criteria was determined using least square linear regression: correlation coefficients (r) were greater than 0.990. No qualification of data was required.

An initial calibration verification (ICV) was analyzed following the ICAL. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within criteria specified in NFG (2017).

A recalculation of the %RSDs and RFs for a compound associated with each internal standard was performed from the raw data, and no errors in calculation were noted; therefore, no qualification of data was required.

1.6 Calibration Verification

Review of the sample chromatograms indicated that all calibration verifications (CVs) were performed before the start of sample analysis. Review of CV summary forms indicated RFs met the evaluation criteria of greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, 0.30 for 1,1,2,2-tetrachloroethane, and greater than 2017 NFG specified minimum RRFs for all other target analytes. Percent difference (%D) values were within criteria specified in NFG (2017) with the exceptions summarized in the table below.

CV (Date/Time)	Analyte	%D
CCVIS 400-473735/2 01/13/2020 08:12	Vinyl chloride	33.8
CCVIS 400-473735/2 01/13/2020 08:12	Bromomethane	66.2
CCVIS 400-473735/2 01/13/2020 08:12	Chloroform	24.7

Analytical data that required qualification based on CV %D data are included in the table below. The results for the validated samples associated with increases in response factors and calculated as positive %D, indicating a potential high bias, were non-detect and were not qualified. No qualification of data was required.

Recalculations of the RFs and %Ds for two target compounds were completed for each CV, and no errors in calculation were noted; therefore, no qualifications of data were required.

1.7 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8260B. Also, a trip blank was analyzed to evaluate the existence and magnitude of contamination problems emanating from sample shipment to the laboratory, and an equipment blank was analyzed to determine the existence and magnitude of contamination emanating from sample collection. Target compounds were reported as non-detect. No qualification of data was required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation criteria with the exception summarized in the following table.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-473735/1002	VOCs	Bromomethane	**166**	NA	10-160
LCS 400-473735/1002	VOCs	Chloroethane	**144**	NA	55-141
LCS 400-473735/1002	VOCs	Hexachlorobutadiene	**146**	NA	53-140

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

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted. No qualification of data was required.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. All surrogate recoveries were within the method acceptance criteria for the validated samples. Approximately 10% of the recoveries were recalculated and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW6A-ROX-010820 was spiked and analyzed for Method 8260 VOCs. MS/MSD recoveries were within evaluation criteria with the exceptions summarized in the table below.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6A-ROX-010820	VOCs	Bromomethane	**165**/138	18	10-150/50
MW6A-ROX-010820	VOCs	2-Chloroethyl vinyl ether	10/**0**	**NC**	10-150/50
MW6A-ROX-010820	VOCs	Hexachlorobutadiene	**151**/130	15	31-149/36

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. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	VOCs	2-Chloroethyl vinyl ether	**UJ**

Approximately 10% of the recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted; therefore. No qualification of data was required.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. IS areas must be within -50% to +100%, and the IS retention times must be within 30 seconds of the IS continuing calibration retention time. IS areas and retention times for the validated samples in this SDG were within evaluation criteria.

The summary forms versus the raw data were verified and no transcription errors were noted. No qualification of data was required.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Approximately 10% of the detected target analytes were recalculated and verified. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, approximately 10% of the detected target analytes were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS, MS/MSD and surrogate data were achieved for this SDG.

1.0 VALIDATION OF SVOC DATA – SDG 400-182304-1-R2

This section describes the validation for nine investigative groundwater samples, one field duplicate, and one equipment blank which were prepared by USEPA SW-846 Method 3520C and analyzed for Semi-Volatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270D and for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270D Low Level. Samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of sample delivery group (SDG) 400-182304-1-R2. Samples included as part of this validation are listed below:

Sample Identification	Sample Identification
MW6A-ROX-010820	MW6B-ROX-010820
MW6C-ROX-010820	MW6D-ROX-010820
P93C-ROX-010820-EB	P93C-ROX-010820
P93D-ROX-010820	P93B-ROX-010820
P93B-ROX-010820-DUP	P56-ROX-010820
P74-ROX-010820	--

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2017).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control sample (LCS)
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standard areas
- Target compound identification and quantitation
- Overall data assessment

1.1.1 Data Package Completeness

The data package was reviewed to make certain that it contained the data contractually required in the deliverable. This included checking the data package for the results of each analyte requested for each field sample submitted in the analytical batch, along with requested QC documentation for the respective methods. The data package was complete.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated bis(2-ethylhexyl) phthalate was detected in the method blank, and although not indicated in the laboratory case narrative, PAHs were detected in equipment blank P93C-ROX-010820-EB. Several SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several investigative and quality control samples. Several SVOC MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW6A-ROX-010820. The SVOC internal standard recovery for chrysene-d_{12} was outside criteria in the continuing calibration verification. Field duplicate pair P93B-ROX-010820/P93B-ROX-010820-Dup was diluted to bring phenol into calibration range of the instrument. The continuing calibration verifications for hexachlorocyclopentadiene and quinoline were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this validation report. The laboratory report was revised to include re-analysis of pentachlorophenol in sample MW6B-ROX-010820, and to correctly report samples MW6D-ROX-010820 and P56-ROX-010820 in which results had previously been switched by the laboratory due to incorrect laboratory ID labels; no qualification of data was required.

No issues or discrepancies were noted in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the chain-of-custody, the summary forms, the raw data forms, and the chromatograms for accuracy, consistency, and holding time compliance. The samples were received in good condition and were received and maintained at temperatures of ≤ 6ºC, and were extracted within seven days of collection and analyzed within 40 days of extraction. No qualification of data was required due to sample preservation or holding time criteria.

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against the laboratory tuning criteria established in Method 8270D.

Based on the raw data, the ion abundance criteria were within evaluation criteria for all masses, therefore; no qualification of the data was required. The raw data forms were checked against the summary forms and no calculation or transcription errors were noted.

1.5 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for semi-volatile analysis. SVOC samples as part of SDG 400-182304-1-R2 were analyzed using instruments Marianne, Pigpen, Snoopy, and Woodstock. PAH samples were analyzed using instrument Sally. The ICALs for instruments Marianne, Pigpen, Snoopy, Woodstock, and Sally were established on 1/3/2020, 1/16/2020, 12/6/2019, 1/9/2020, and 11/5/2019, respectively. ICALs for instruments Marianne, Pigpen, Snoopy, Woodstock, and Sally were established prior to sample analysis and using at least five concentration standards to establish the initial calibration curve as required by Method 8270D and 8270D Low Level. An average response factor (RF) was determined for each target analyte, and the RFs were reviewed and verified as greater than 0.05 for all target analytes.

Review of the initial calibration summary forms for SVOCs and PAHs indicated calibration check compounds (CCCs) had percent relative standard deviations (%RSDs) $\leq$ 30%. All other target analytes had %RSDs less than 15% for CCCs with some exceptions. The initial calibration for compounds with %RSD values outside evaluation criteria was determined using least square linear regression and the correlation coefficients (r) were greater than 0.990.

Initial calibration verifications (ICVs) for SVOCs and PAHs were analyzed following the initial calibrations. Percent difference (%D) values comparing ICV RF to the average ICAL RFs were less than those specified in NFG (2017) or were > 20% for target, or closely analogous, compounds except for 1,4-dioxane (22.7%), di-n-butyl phthalate (23.8%), and benzoic acid (73.3%). Data associated with ICV %D above evaluation criteria indicating a possible high bias were non-detect and did not require qualification. No qualification of data was required. No qualification of data was required.

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.6 Calibration Verification

Review of sample chromatograms indicated the CVs were performed prior to sample analysis. Review of continuing calibration summary forms for SVOCs and PAHs indicated all RFs met the evaluation criteria of greater than 0.05 for all target analytes. In addition, percent differences (%Ds) met the evaluation criteria of less than or equal to specified in NFG (2017) for target, or closely analogous, compounds with the exceptions summarized in the table below.

CV (Date/Time)	Analyte	%D
CCVIS 400-474099/2 01/15/2020 11:59	N-Nitrosodimethylamine	**29.4**
CCVIS 400-474099/2 01/15/2020 11:59	Hexachlorocyclopentadiene	**-31.3**
CCVIS 400-474099/2 01/15/2020 11:59	N-Nitrophenol	**29.3**
CCV 400-474099/4 01/15/2020 12:49	Quinoline	**-25.1**

Analytical data that required qualification based on CV %D data are included in the table below. Analytical data associated with CCV %D above evaluation criteria indicating a potential high bias that were non-detect did not require qualification. The compounds n-nitrosodimethylamine and n-nitrophenol were non-detect in the associated data and di not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	SVOCs	Quinoline	**UJ**
MW6B-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6B-ROX-010820	SVOCs	Quinoline	**UJ**
MW6C-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6C-ROX-010820	SVOCs	Quinoline	**UJ**
MW6D-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6D-ROX-010820	SVOCs	Quinoline	**UJ**
P93C-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93C-ROX-010820	SVOCs	Quinoline	**UJ**
P93D-ROX-010820	SVOCs	Quinoline	**UJ**
P93B-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93B-ROX-010820	SVOCs	Quinoline	**UJ**

Sample ID	Parameter	Analyte	Qualification
P56-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P56-ROX-010820	SVOCs	Quinoline	**UJ**
P74-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-010820	SVOCs	Quinoline	**UJ**

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8270D. An equipment blank was analyzed to determine the existence and magnitude of contamination emanating from sample collection. Target analytes were not detected in the blanks with the exceptions summarized in the table below.

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-473677/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	6.53 µg/L
P93C-ROX-010820-EB	PAHs	1-Methylnaphthalene	0.094 µg/L
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.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS recoveries were within evaluation criteria with the exceptions summarized in the table below.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-473677/2-A/3-A	SVOCs	Benzoic acid	35/20	**53**	10-150/30
LCS/LCSD 400-473677/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	102/**157**	**43**	48-150/30
LCS/LCSD 400-473677/2-A/3-A	SVOCs	2,4-Dinitrophenol	22/32	**39**	10-150/30
LCS/LCSD 400-473677/4-A/5-A	SVOCs	Benzenethiol	**2/2**	9	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. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-010820	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-010820	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93C-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93D-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93B-ROX-010820	SVOCs	Benzenethiol	**UJ**
P93B-ROX-010820-Dup	SVOCs	Benzenethiol	**UJ**
P56-ROX-010820	SVOCs	Benzenethiol	**UJ**
P74-ROX-010820	SVOCs	Benzenethiol	**UJ**

Approximately 10% of the spiking compound recoveries for the LCS were recalculated from the raw data and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per-sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples with the exceptions summarized in the table below.

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6A-ROX-010820	SVOCs	2-Fluorophenol	**2**	10-120
MW6A-ROX-010820	SVOCs	Nitrobenzene-d_5	**18**	27-120
P93D-ROX-010820	PAHs	Terphenyl-d_{14}	**142**	33-138
P93D-ROX-010820	SVOCs	2-Fluorophenol	**4**	10-120
P93D-ROX-010820	SVOCs	2,4,6-Tribromophenol	**11**	15-135
P93B-ROX-010820	SVOCs	Terphenyl-d_{14}	**50**	53-125
P93B-ROX-010820-Dup	SVOCs	2-Fluorobiphenyl	**32**	34-120
P93B-ROX-010820-Dup	SVOCs	Terphenyl-d_{14}	**39**	53-125
MW6A-ROX-010820 MSD	SVOCs	2-Fluorophenol	**0.2**	10-120
MW6A-ROX-010820 MSD	SVOCs	Nitrobenzene-d_5	**3**	27-120
MW6A-ROX-010820 MSD	SVOCs	Phenol-d_5	**2**	10-120
MW6A-ROX-010820 MSD	SVOCs	Terphenyl-d_{14}	**50**	53-125
MW6A-ROX-010820 MSD	SVOCs	2,4,6-Tribromophenol	**0**	15-135
MW6A-ROX-010820 MSD	PAHs	Nitrobenzene-d_5	**3**	19-130

Analytical data that required qualification based on surrogate data are included in the table below. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. 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.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-010820	SVOCs	Benzoic acid	**UJ**
P93D-ROX-010820	SVOCs	Benzyl alcohol	**UJ**

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-010820	SVOCs	4-Chloro-3-methylphenol	UJ
P93D-ROX-010820	SVOCs	2-Chlorophenol	UJ
P93D-ROX-010820	SVOCs	2,4-Dichlorophenol	UJ
P93D-ROX-010820	SVOCs	2,4-Dimethylphenol	UJ
P93D-ROX-010820	SVOCs	2,4-Dinitrophenol	UJ
P93D-ROX-010820	SVOCs	2-Methylphenol	UJ
P93D-ROX-010820	SVOCs	3&4-Methylphenol	UJ
P93D-ROX-010820	SVOCs	2-Nitrophenol	UJ
P93D-ROX-010820	SVOCs	4-Nitrophenol	UJ
P93D-ROX-010820	SVOCs	Pentachlorophenol	UJ
P93D-ROX-010820	SVOCs	Phenol	UJ
P93D-ROX-010820	SVOCs	2,4,5-Trichlorophenol	UJ
P93D-ROX-010820	SVOCs	2,4,6-Trichlorophenol	UJ
P93B-ROX-010820-Dup	SVOCs	Aniline	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Chloroethoxy) methane	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Chloroethyl) ether	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Chloroisopropyl) ether	UJ
P93B-ROX-010820-Dup	SVOCs	bis(2-Ethylhexyl) phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	4-Bromophenyl phenyl ether	UJ
P93B-ROX-010820-Dup	SVOCs	Butyl benzyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	4-Chloroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	2-Chloronaphthalene	UJ
P93B-ROX-010820-Dup	SVOCs	4-Chlorophenyl phenyl ether	UJ
P93B-ROX-010820-Dup	SVOCs	Dibenz[a,h]acridine	UJ
P93B-ROX-010820-Dup	SVOCs	Dibenzofuran	UJ
P93B-ROX-010820-Dup	SVOCs	3,3'-Dichlorobenzidine	UJ
P93B-ROX-010820-Dup	SVOCs	Diethyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	Dimethyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	Di-n-butyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	4,6-Dinitro-ortho-cresol	UJ
P93B-ROX-010820-Dup	SVOCs	2,4-Dinitrotoluene	UJ
P93B-ROX-010820-Dup	SVOCs	2,6-Dinitrotoluene	UJ
P93B-ROX-010820-Dup	SVOCs	Di-n-octyl phthalate	UJ
P93B-ROX-010820-Dup	SVOCs	1,4-Dioxane	UJ
P93B-ROX-010820-Dup	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	UJ
P93B-ROX-010820-Dup	SVOCs	Hexachlorobenzene	UJ
P93B-ROX-010820-Dup	SVOCs	Hexachlorocyclopentadiene	UJ
P93B-ROX-010820-Dup	SVOCs	Hexachloroethane	UJ
P93B-ROX-010820-Dup	SVOCs	Indene	UJ
P93B-ROX-010820-Dup	SVOCs	Isophorone	UJ
P93B-ROX-010820-Dup	SVOCs	2-Nitroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	3-Nitroaniline	UJ
P93B-ROX-010820-Dup	SVOCs	4-Nitroaniline	UJ

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-010820-Dup	SVOCs	Nitrobenzene	**UJ**
P93B-ROX-010820-Dup	SVOCs	n-Nitrosodimethylamine	**UJ**
P93B-ROX-010820-Dup	SVOCs	n-Nitrosodi-n-propylamine	**UJ**
P93B-ROX-010820-Dup	SVOCs	n-Nitrosodiphenylamine	**UJ**
P93B-ROX-010820-Dup	SVOCs	Pyridine	**UJ**
P93B-ROX-010820-Dup	SVOCs	Quinoline	**UJ**

Approximately 10% of the surrogate recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW6A-ROX-010820 was spiked and duplicated for Method 8270 SVOCs and PAHs. MS/MSD recoveries were within evaluation criteria with the exceptions of those summarized in the table below.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6A-ROX-010820	SVOCs	Aniline	35/**0**	**NC**	10-143/63
MW6A-ROX-010820	SVOCs	Benzoic acid	99/**0**	**NC**	10-134/49
MW6A-ROX-010820	SVOCs	Benzyl alcohol	75/40	**61**	10-154/37
MW6A-ROX-010820	SVOCs	bis(2-Chloroethyl) ether	70/44	**47**	28-130/42
MW6A-ROX-010820	SVOCs	bis(2-Ethylhexyl) phthalate	115/**17**	**149**	43-160/35
MW6A-ROX-010820	SVOCs	Butyl benzyl phthalate	76/**7**	**169**	43-151/32
MW6A-ROX-010820	SVOCs	4-Chloroaniline	39/**0**	**NC**	10-152/94
MW6A-ROX-010820	SVOCs	4-Chloro-3-methylphenol	66/**0**	**NC**	17-156/40
MW6A-ROX-010820	SVOCs	2-Chlorophenol	63/**0**	**NC**	19-130/42
MW6A-ROX-010820	SVOCs	3,3'-Dichlorobenzidine	**0/0**	**NC**	10-172/58
MW6A-ROX-010820	SVOCs	2,4-Dichlorophenol	63/**0**	**NC**	16-147/43
MW6A-ROX-010820	SVOCs	Diethyl phthalate	71/**5**	**172**	23-160/40
MW6A-ROX-010820	SVOCs	2,4-Dimethylphenol	71/38	**61**	25-146/47
MW6A-ROX-010820	SVOCs	Dimethyl phthalate	65/**0**	**NC**	11-158/36
MW6A-ROX-010820	SVOCs	Di-n-butyl phthalate	79/**12**	**150**	28-162/32
MW6A-ROX-010820	SVOCs	4,6-Dinitro-ortho-cresol	92/**0**	**NC**	10-168/42
MW6A-ROX-010820	SVOCs	2,4-Dinitrophenol	106/**0**	**NC**	10-166/36
MW6A-ROX-010820	SVOCs	2,4-Dinitrotoluene	64/**0**	**NC**	26-158/28
MW6A-ROX-010820	SVOCs	2,6-Dinitrotoluene	65/**0**	**NC**	19-157/28
MW6A-ROX-010820	SVOCs	Di-n-octyl phthalate	81/**11**	**152**	42-150/35
MW6A-ROX-010820	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	76/27	**95**	19-162/40
MW6A-ROX-010820	SVOCs	Hexachlorobenzene	77/**40**	**65**	45-145/33
MW6A-ROX-010820	SVOCs	Hexachlorocyclopentadiene	50/**0**	**NC**	10-151/50
MW6A-ROX-010820	SVOCs	Hexachloroethane	67/**0**	**NC**	29-130/41
MW6A-ROX-010820	SVOCs	Indene	53/28	**63**	22-130/40
MW6A-ROX-010820	SVOCs	Isophorone	63/119	**60**	24-144/33

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6A-ROX-010820	SVOCs	2-Methylphenol	71/**14**	**135**	22-130/47
MW6A-ROX-010820	SVOCs	3&4-Methylphenol	72/**11**	**146**	31-130/47
MW6A-ROX-010820	SVOCs	2-Nitroaniline	79/**0**	**NC**	10-162/33
MW6A-ROX-010820	SVOCs	3-Nitroaniline	53/**0**	**NC**	10-163/39
MW6A-ROX-010820	SVOCs	4-Nitroaniline	89/**0**	**NC**	10-162/50
MW6A-ROX-010820	SVOCs	Nitrobenzene	64/**3**	**184**	34-135/35
MW6A-ROX-010820	SVOCs	2-Nitrophenol	69/**0**	**NC**	27-134/43
MW6A-ROX-010820	SVOCs	4-Nitrophenol	97/**0**	**NC**	10-175/82
MW6A-ROX-010820	SVOCs	n-Nitrosodimethylamine	75/**0**	**NC**	10-139/62
MW6A-ROX-010820	SVOCs	n-Nitrosodi-n-propylamine	75/**0**	**NC**	13-147/36
MW6A-ROX-010820	SVOCs	n-Nitrosodiphenylamine	67/**19**	**112**	31-150/34
MW6A-ROX-010820	SVOCs	Pentachlorophenol	96/**4**	**184**	10-180/42
MW6A-ROX-010820	SVOCs	Phenol	71/**0**	**NC**	23-130/52
MW6A-ROX-010820	SVOCs	2,4,5-Trichlorophenol	75/**0**	**NC**	43-137/42
MW6A-ROX-010820	SVOCs	2,4,6-Trichlorophenol	66/**0**	**NC**	42-135/44

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. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	SVOCs	Aniline	**UJ**
MW6A-ROX-010820	SVOCs	Benzoic acid	**UJ**
MW6A-ROX-010820	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Butyl benzyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	4-Chloroaniline	**UJ**
MW6A-ROX-010820	SVOCs	4-Chloro-3-methylphenol	**UJ**
MW6A-ROX-010820	SVOCs	2-Chlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW6A-ROX-010820	SVOCs	2,4-Dichlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	Diethyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Dimethyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Di-n-butyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW6A-ROX-010820	SVOCs	2,4-Dinitrophenol	**UJ**
MW6A-ROX-010820	SVOCs	2,4-Dinitrotoluene	**UJ**
MW6A-ROX-010820	SVOCs	2,6-Dinitrotoluene	**UJ**
MW6A-ROX-010820	SVOCs	Di-n-octyl phthalate	**UJ**
MW6A-ROX-010820	SVOCs	Hexachlorobenzene	**UJ**
MW6A-ROX-010820	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6A-ROX-010820	SVOCs	Hexachloroethane	**UJ**
MW6A-ROX-010820	SVOCs	2-Methylphenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-010820	SVOCs	3&4-Methylphenol	**UJ**
MW6A-ROX-010820	SVOCs	2-Nitroaniline	**UJ**
MW6A-ROX-010820	SVOCs	3-Nitroaniline	**UJ**
MW6A-ROX-010820	SVOCs	4-Nitroaniline	**UJ**
MW6A-ROX-010820	SVOCs	Nitrobenzene	**UJ**
MW6A-ROX-010820	SVOCs	2-Nitrophenol	**UJ**
MW6A-ROX-010820	SVOCs	4-Nitrophenol	**UJ**
MW6A-ROX-010820	SVOCs	n-Nitrosodimethylamine	**UJ**
MW6A-ROX-010820	SVOCs	n-Nitrosodi-n-propylamine	**UJ**
MW6A-ROX-010820	SVOCs	n-Nitrosodiphenylamine	**UJ**
MW6A-ROX-010820	SVOCs	Pentachlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	Phenol	**UJ**
MW6A-ROX-010820	SVOCs	2,4,5-Trichlorophenol	**UJ**
MW6A-ROX-010820	SVOCs	2,4,6-Trichlorophenol	**UJ**

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. Following Method 8270D, the IS areas for the samples and CVs must be within –50% to +100% and retention times must be within 30 seconds of the IS area and retention time of the midpoint of the ICAL.

The IS areas for the CVs and the validated samples in this SDG were within evaluation criteria except for the internal standard chrysene-d_{12} ICV 400-472769/11 recovery (381274) that was outside evaluation criteria (417202-1668806). Initial calibration verifications (ICV) are quality control samples and do not require qualification. No qualification of data was required.

1.12 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, the spectra of the identified compounds were verified against the library spectra, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. A minimum of 10% of the detected target analytes and spiking compounds were verified. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, 10% of the target analytes were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required and review of the data indicated the correct RLs were reported.

1.13 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS, MS/MSD, and surrogate data were achieved for this SDG.

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-182304-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 2

For:
AECOM Technical Services Inc.
100 N. Broadway
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Attn: Elizabeth Kunkel

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Reviewed 3/1/2020 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: 400-182304-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-182304-1

Comments
Revised Report
Report revised to include both original and reanalysis results for MW6B-ROX-010820 (400-182304-4).

Due to historical data comparison, it was identified that MW6D-ROX-010820 (400-182304-6) and P56-ROX-010820 (400-182304-14) lab ID labels had inadvertently been switched for the VOC vials and SVOCs bottles. The report has been revised to correct the data reported. Supersedes report dated 2-7-2020.

020720 Revised Report to correct pentachlorophenol result on sample -4 after re-analysis. This report replaces the report previously issued on 012720.

Receipt
The samples were received on 1/9/2020 9:36 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.2° C, 1.5° C, 1.6° C and 2.9° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-473735 recovered above the upper control limit for 1,2-Dichloropropane, Bromomethane, Chloroform and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-473735 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 400-473735 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-473735 recovered outside control limits for the following analytes: Bromomethane, Chloroethane and Hexachlorobutadiene. 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-ROXX-010820-8260-A (400-182304-1), MW6A-ROX-010820 (400-182304-3), MW6B-ROX-010820 (400-182304-4), MW6C-ROX-010820 (400-182304-5), MW6D-ROX-010820 (400-182304-6), TB-ROX-010820-8260-B (400-182304-7), P93C-ROX-010820-EB (400-182304-9), P93C-ROX-010820 (400-182304-10), P93D-ROX-010820 (400-182304-11), P93B-ROX-010820 (400-182304-12), P93B-ROX-010820-DUP (400-182304-13), P56-ROX-010820 (400-182304-14) and P74-ROX-010820 (400-182304-15). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-010820 (400-182304-12) and P93B-ROX-010820-DUP (400-182304-13). 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 initial calibration verification (ICV) analyzed in batch 400-469009 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The method blank for preparation batch 400-473677 and analytical batch 400-474099 contained Bis(2-ethylhexyl) phthalate 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.

Job ID: 400-182304-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-474099 recovered above the upper control limit for 4-Nitrophenol 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 400-474099 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Quinoline. 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 laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-473677 and analytical batch 400-474099 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 laboratory control sample duplicate (LCSD) for preparation batch 400-473677 and analytical batch 400-473927 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate. These analytes were biased high in the LCSD and were not detected in the associated samples; 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 400-473677 and analytical batch 400-473927 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, Benzoic acid and Bis(2-ethylhexyl) phthalate.

Method 8270D: The matrix spike (MS) recoveries for preparation batch 400-473677 and analytical batch 400-474099 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: Surrogate recovery for the following sample was outside control limits: P93B-ROX-010820-DUP (400-182304-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: MW6A-ROX-010820 (400-182304-3), P93B-ROX-010820 (400-182304-12). These results have been reported and qualified.

Method 8270D: Two of the six surrogates are outside the control limit. The sample is non-detect, and the data has been reported: P93D-ROX-010820 (400-182304-11).

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW6A-ROX-010820 (400-182304-3[MSD]) and P93D-ROX-010820 (400-182304-11), (CCVIS 400-474274/2). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-473548 and analytical batch 400-473595 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane.

Method 8011: The laboratory control sample duplicate (LCSD) for preparation batch 400-473548 and analytical batch 400-473595 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-473595 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.

Job ID: 400-182304-1 (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: 400-182304-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182304-1	TB-ROXX-010820-8260-A	Water	01/08/20 00:00	01/09/20 09:36	
400-182304-2	TB-ROXX-010820-8011-A	Water	01/08/20 00:00	01/09/20 09:36	
400-182304-3	MW6A-ROX-010820	Water	01/08/20 08:55	01/09/20 09:36	
400-182304-4	MW6B-ROX-010820	Water	01/08/20 10:05	01/09/20 09:36	
400-182304-5	MW6C-ROX-010820	Water	01/08/20 10:55	01/09/20 09:36	
400-182304-6	MW6D-ROX-010820	Water	01/08/20 12:15	01/09/20 09:36	
400-182304-7	TB-ROX-010820-8260-B	Water	01/08/20 00:00	01/09/20 09:36	
400-182304-8	TB-ROX-010820-8011-B	Water	01/08/20 00:00	01/09/20 09:36	
400-182304-9	P93C-ROX-010820-EB	Water	01/08/20 08:40	01/09/20 09:36	
400-182304-10	P93C-ROX-010820	Water	01/08/20 09:55	01/09/20 09:36	
400-182304-11	P93D-ROX-010820	Water	01/08/20 11:20	01/09/20 09:36	
400-182304-12	P93B-ROX-010820	Water	01/08/20 10:25	01/09/20 09:36	
400-182304-13	P93B-ROX-010820-DUP	Water	01/08/20 10:25	01/09/20 09:36	
400-182304-14	P56-ROX-010820	Water	01/08/20 12:15	01/09/20 09:36	
400-182304-15	P74-ROX-010820	Water	01/08/20 13:30	01/09/20 09:36	

Detection Summary

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

Job ID: 400-182304-1

Client Sample ID: TB-ROXX-010820-8260-A — Lab Sample ID: 400-182304-1

No Detections.

Client Sample ID: TB-ROXX-010820-8011-A — Lab Sample ID: 400-182304-2

No Detections.

Client Sample ID: MW6A-ROX-010820 — Lab Sample ID: 400-182304-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.86	J	1.0	0.74	ug/L	1		8260B	Total/NA
Acenaphthylene	0.18	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW6B-ROX-010820 — Lab Sample ID: 400-182304-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2.2	J	19	1.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW6C-ROX-010820 — Lab Sample ID: 400-182304-5

No Detections.

Client Sample ID: MW6D-ROX-010820 — Lab Sample ID: 400-182304-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.79	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: TB-ROX-010820-8260-B — Lab Sample ID: 400-182304-7

No Detections.

Client Sample ID: TB-ROX-010820-8011-B — Lab Sample ID: 400-182304-8

No Detections.

Client Sample ID: P93C-ROX-010820-EB — Lab Sample ID: 400-182304-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.094	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.10	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P93C-ROX-010820 — Lab Sample ID: 400-182304-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.39	J	1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.9		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: P93D-ROX-010820 — Lab Sample ID: 400-182304-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.1		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: P93B-ROX-010820 — Lab Sample ID: 400-182304-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	94000		500	190	ug/L	500		8260B	Total/NA
Phenol - DL	190	J	48	12	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820-DUP

Lab Sample ID: 400-182304-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	100000	J	500	190	ug/L	500		8260B	Total/NA
Phenol - DL	90		48	12	ug/L	5		8270D	Total/NA

Client Sample ID: P56-ROX-010820

Lab Sample ID: 400-182304-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	9.4	J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene	1.7		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	20		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	6.2		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	1.8		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	0.94	J	1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	21		1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.1		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.0		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	0.61	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	1.5		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.65	J	1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	6.5	J	10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.52		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	25		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	19		0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P74-ROX-010820

Lab Sample ID: 400-182304-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	14		1.0	0.38	ug/L	1		8260B	Total/NA
Toluene	0.50	J	1.0	0.41	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: 400-182304-1

Client Sample ID: TB-ROXX-010820-8260-A

Lab Sample ID: 400-182304-1

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 12:26	1
Acrolein	ND		20	10	ug/L			01/13/20 12:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 12:26	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 12:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 12:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 12:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 12:26	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 12:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 12:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 12:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 12:26	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 12:26	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 12:26	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 12:26	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 12:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 12:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 12:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 12:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 12:26	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 12:26	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 12:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 12:26	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 12:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 12:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 12:26	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 12:26	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 12:26	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 12:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 12:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 12:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 12:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 12:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 12:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 12:26	1

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

Job ID: 400-182304-1

Client Sample ID: TB-ROXX-010820-8260-A
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 12:26	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 12:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 12:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 12:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 12:26	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 12:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 12:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 12:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 12:26	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:26	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 12:26	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 12:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 12:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 12:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 12:26	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 12:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 12:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 12:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*01/13/20 12:26*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*01/13/20 12:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/13/20 12:26*	*1*

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

Job ID: 400-182304-1

Client Sample ID: TB-ROXX-010820-8011-A
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-2
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	0.0056	ug/L		01/10/20 09:28	01/10/20 22:10	1
1,2-Dibromoethane	ND	*	0.021	0.0051	ug/L		01/10/20 09:28	01/10/20 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*01/10/20 09:28*	*01/10/20 22:10*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6A-ROX-010820
Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 09:31	1
Acrolein	ND		20	10	ug/L			01/13/20 09:31	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 09:31	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 09:31	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 09:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 09:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 09:31	1
Bromomethane	ND	F1 *	1.0	0.98	ug/L			01/13/20 09:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 09:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 09:31	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/13/20 09:31	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 09:31	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 09:31	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 09:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 09:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 09:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 09:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 09:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 09:31	1
Hexachlorobutadiene	ND	F1 *	5.0	0.90	ug/L			01/13/20 09:31	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 09:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 09:31	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 09:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 09:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 09:31	1
Methyl tert-butyl ether	0.86	J	1.0	0.74	ug/L			01/13/20 09:31	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 09:31	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 09:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 09:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 09:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 09:31	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 09:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 09:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 09:31	1

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

Job ID: 400-182304-1

Client Sample ID: MW6A-ROX-010820
Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 09:31	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 09:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 09:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 09:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 09:31	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 09:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 09:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 09:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 09:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 09:31	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 09:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 09:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 09:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 09:31	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 09:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 09:31	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 09:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*01/13/20 09:31*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*01/13/20 09:31*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*01/13/20 09:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
Acenaphthylene	0.18	J	0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 14:40	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 14:40	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*120*		*33 - 138*	*01/10/20 17:35*	*01/16/20 14:40*	*1*
2-Fluorobiphenyl	*79*		*15 - 122*	*01/10/20 17:35*	*01/16/20 14:40*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6A-ROX-010820
Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	23		19 - 130	01/10/20 17:35	01/16/20 14:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F1 UJ	9.6	3.6	ug/L		01/10/20 17:35	01/15/20 15:25	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 15:25	1
Benzoic acid	ND	* F1 UJ	29	7.0	ug/L		01/10/20 17:35	01/15/20 15:25	1
Benzyl alcohol	ND	F2	9.6	1.9	ug/L		01/10/20 17:35	01/15/20 15:25	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 15:25	1
Bis(2-chloroethyl)ether	ND	F2	9.6	0.71	ug/L		01/10/20 17:35	01/15/20 15:25	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/10/20 17:35	01/15/20 15:25	1
Bis(2-ethylhexyl) phthalate	ND	* F2 F1 UJ	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 15:25	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 15:25	1
Butyl benzyl phthalate	ND	F2 F1 UJ	9.6	0.66	ug/L		01/10/20 17:35	01/15/20 15:25	1
4-Chloroaniline	ND	F1 UJ	9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:25	1
4-Chloro-3-methylphenol	ND	F1 UJ	9.6	3.6	ug/L		01/10/20 17:35	01/15/20 15:25	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 15:25	1
2-Chlorophenol	ND	F1 UJ	9.6	2.1	ug/L		01/10/20 17:35	01/15/20 15:25	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 15:25	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 15:25	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 15:25	1
3,3'-Dichlorobenzidine	ND	F1 UJ	9.6	2.5	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,4-Dichlorophenol	ND	F1 UJ	9.6	2.9	ug/L		01/10/20 17:35	01/15/20 15:25	1
Diethyl phthalate	ND	F2 F1 UJ	9.6	0.67	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,4-Dimethylphenol	ND	F2	9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:25	1
Dimethyl phthalate	ND	F1 UJ	9.6	0.57	ug/L		01/10/20 17:35	01/15/20 15:25	1
Di-n-butyl phthalate	ND	F2 F1 UJ	9.6	2.6	ug/L		01/10/20 17:35	01/15/20 15:25	1
4,6-Dinitro-ortho-cresol	ND	F1 UJ	9.6	1.9	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,4-Dinitrophenol	ND	* F1 UJ	29	3.3	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,4-Dinitrotoluene	ND	F1 UJ	9.6	1.8	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,6-Dinitrotoluene	ND	F1 UJ	9.6	1.8	ug/L		01/10/20 17:35	01/15/20 15:25	1
Di-n-octyl phthalate	ND	F2 F1 UJ	9.6	0.42	ug/L		01/10/20 17:35	01/15/20 15:25	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 15:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	9.6	0.96	ug/L		01/10/20 17:35	01/15/20 15:25	1
Hexachlorobenzene	ND	F2 F1 UJ	9.6	0.24	ug/L		01/10/20 17:35	01/15/20 15:25	1
Hexachlorocyclopentadiene	ND	F1 UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 15:25	1
Hexachloroethane	ND	F1 UJ	9.6	4.0	ug/L		01/10/20 17:35	01/15/20 15:25	1
Indene	ND	F2	9.6	0.96	ug/L		01/10/20 17:35	01/15/20 15:25	1
Isophorone	ND	F2	9.6	0.55	ug/L		01/10/20 17:35	01/15/20 15:25	1
2-Methylphenol	ND	F2 F1 UJ	9.6	1.7	ug/L		01/10/20 17:35	01/15/20 15:25	1
3 & 4 Methylphenol	ND	F2 F1 UJ	19	0.99	ug/L		01/10/20 17:35	01/15/20 15:25	1
2-Nitroaniline	ND	F1 UJ	9.6	2.1	ug/L		01/10/20 17:35	01/15/20 15:25	1
3-Nitroaniline	ND	F1 UJ	9.6	1.7	ug/L		01/10/20 17:35	01/15/20 15:25	1
4-Nitroaniline	ND	F1 UJ	9.6	2.4	ug/L		01/10/20 17:35	01/15/20 15:25	1
Nitrobenzene	ND	F2 F1 UJ	9.6	0.53	ug/L		01/10/20 17:35	01/15/20 15:25	1
2-Nitrophenol	ND	F1 UJ	9.6	0.62	ug/L		01/10/20 17:35	01/15/20 15:25	1
4-Nitrophenol	ND	F1 UJ	9.6	2.0	ug/L		01/10/20 17:35	01/15/20 15:25	1
N-Nitrosodimethylamine	ND	F1 UJ	9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:25	1

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

Job ID: 400-182304-1

Client Sample ID: MW6A-ROX-010820
Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-3
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	F1 UJ	9.6	3.2	ug/L		01/10/20 17:35	01/15/20 15:25	1
N-Nitrosodiphenylamine	ND	F2 F1 UJ	9.6	0.45	ug/L		01/10/20 17:35	01/15/20 15:25	1
Pentachlorophenol	ND	F2 F1 UJ	19	1.7	ug/L		01/10/20 17:35	01/15/20 15:25	1
Phenol	ND	F1 UJ	9.6	2.5	ug/L		01/10/20 17:35	01/15/20 15:25	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 15:25	1
Quinoline	ND	UJ	9.6	5.7	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,4,5-Trichlorophenol	ND	F1 UJ	9.6	3.5	ug/L		01/10/20 17:35	01/15/20 15:25	1
2,4,6-Trichlorophenol	ND	F1 UJ	9.6	3.3	ug/L		01/10/20 17:35	01/15/20 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*34 - 120*	*01/10/20 17:35*	*01/15/20 15:25*	*1*
2-Fluorophenol	*2*	*X*	*10 - 120*	*01/10/20 17:35*	*01/15/20 15:25*	*1*
Nitrobenzene-d5	*18*	*X*	*27 - 120*	*01/10/20 17:35*	*01/15/20 15:25*	*1*
Phenol-d5	*17*		*10 - 120*	*01/10/20 17:35*	*01/15/20 15:25*	*1*
Terphenyl-d14	*80*		*53 - 125*	*01/10/20 17:35*	*01/15/20 15:25*	*1*
2,4,6-Tribromophenol	*15*		*15 - 135*	*01/10/20 17:35*	*01/15/20 15:25*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	F1 *	0.030	0.0056	ug/L		01/10/20 09:28	01/10/20 22:30	1
1,2-Dibromoethane	ND	*	0.020	0.0051	ug/L		01/10/20 09:28	01/10/20 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*01/10/20 09:28*	*01/10/20 22:30*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6B-ROX-010820
Date Collected: 01/08/20 10:05
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 13:32	1
Acrolein	ND		20	10	ug/L			01/13/20 13:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 13:32	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 13:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 13:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 13:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 13:32	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 13:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 13:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 13:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 13:32	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 13:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 13:32	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 13:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 13:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 13:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 13:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 13:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 13:32	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 13:32	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 13:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 13:32	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 13:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 13:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 13:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 13:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 13:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 13:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 13:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 13:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 13:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 13:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 13:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 13:32	1

Client Sample ID: MW6B-ROX-010820
Date Collected: 01/08/20 10:05
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 13:32	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 13:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 13:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 13:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 13:32	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 13:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 13:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 13:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 13:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 13:32	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 13:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 13:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 13:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 13:32	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 13:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 13:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*01/13/20 13:32*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*01/13/20 13:32*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*01/13/20 13:32*	*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	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 15:36	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:36	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*125*		*33 - 138*	*01/10/20 17:35*	*01/16/20 15:36*	*1*
2-Fluorobiphenyl	*89*		*15 - 122*	*01/10/20 17:35*	*01/16/20 15:36*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6B-ROX-010820
Date Collected: 01/08/20 10:05
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	107		19 - 130	01/10/20 17:35	01/16/20 15:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 16:29	1
Benzenethiol	ND	*	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 16:29	1
Benzoic acid	ND	* UJ	29	7.0	ug/L		01/10/20 17:35	01/15/20 16:29	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 16:29	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 16:29	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 16:29	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 16:29	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 16:29	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 16:29	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 16:29	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 16:29	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 16:29	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 16:29	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 16:29	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 16:29	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 16:29	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 16:29	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 16:29	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 16:29	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/10/20 17:35	01/15/20 16:29	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 16:29	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 16:29	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 16:29	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 16:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 16:29	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 16:29	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 16:29	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 16:29	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 16:29	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 16:29	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 16:29	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/10/20 17:35	01/15/20 16:29	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 16:29	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 16:29	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 16:29	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 16:29	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 16:29	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 16:29	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 16:29	1

Client Sample ID: MW6B-ROX-010820
Date Collected: 01/08/20 10:05
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 16:29	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 16:29	1
Pentachlorophenol	2.2	J	19	1.7	ug/L		01/10/20 17:35	01/15/20 16:29	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 16:29	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 16:29	1
Quinoline	ND		9.6	5.8	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 16:29	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*34 - 120*	*01/10/20 17:35*	*01/15/20 16:29*	*1*
2-Fluorophenol	*38*		*10 - 120*	*01/10/20 17:35*	*01/15/20 16:29*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*01/10/20 17:35*	*01/15/20 16:29*	*1*
Phenol-d5	*56*		*10 - 120*	*01/10/20 17:35*	*01/15/20 16:29*	*1*
Terphenyl-d14	*69*		*53 - 125*	*01/10/20 17:35*	*01/15/20 16:29*	*1*
2,4,6-Tribromophenol	*62*		*15 - 135*	*01/10/20 17:35*	*01/15/20 16:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	02/06/20 14:40	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		01/10/20 09:28	01/10/20 23:31	1
1,2-Dibromoethane	ND	*	0.021	0.0052	ug/L		01/10/20 09:28	01/10/20 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*01/10/20 09:28*	*01/10/20 23:31*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6C-ROX-010820
Date Collected: 01/08/20 10:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 13:54	1
Acrolein	ND		20	10	ug/L			01/13/20 13:54	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 13:54	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 13:54	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 13:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 13:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 13:54	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 13:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 13:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 13:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 13:54	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 13:54	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 13:54	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 13:54	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 13:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 13:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 13:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 13:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 13:54	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 13:54	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 13:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 13:54	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 13:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 13:54	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 13:54	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 13:54	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 13:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 13:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 13:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 13:54	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 13:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 13:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 13:54	1

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

Job ID: 400-182304-1

Client Sample ID: MW6C-ROX-010820
Date Collected: 01/08/20 10:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 13:54	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 13:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 13:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 13:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 13:54	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 13:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 13:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 13:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 13:54	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:54	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 13:54	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 13:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 13:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 13:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 13:54	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 13:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 13:54	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*01/13/20 13:54*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*01/13/20 13:54*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/13/20 13:54*	*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		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 15:55	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 15:55	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*113*		*33 - 138*	*01/10/20 17:35*	*01/16/20 15:55*	*1*
2-Fluorobiphenyl	*79*		*15 - 122*	*01/10/20 17:35*	*01/16/20 15:55*	*1*

Client Sample ID: MW6C-ROX-010820
Date Collected: 01/08/20 10:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	94		19 - 130	01/10/20 17:35	01/16/20 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 16:51	1
Benzenethiol	ND	*	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 16:51	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 16:51	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 16:51	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 16:51	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 16:51	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 16:51	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 16:51	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 16:51	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 16:51	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 16:51	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 16:51	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 16:51	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 16:51	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 16:51	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 16:51	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 16:51	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 16:51	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 16:51	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/10/20 17:35	01/15/20 16:51	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 16:51	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 16:51	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 16:51	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 16:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 16:51	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 16:51	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/10/20 17:35	01/15/20 16:51	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 16:51	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 16:51	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 16:51	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 16:51	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/10/20 17:35	01/15/20 16:51	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 16:51	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 16:51	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 16:51	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 16:51	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 16:51	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 16:51	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 16:51	1

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

Job ID: 400-182304-1

Client Sample ID: MW6C-ROX-010820
Date Collected: 01/08/20 10:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 16:51	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 16:51	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 16:51	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 16:51	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 16:51	1
Quinoline	ND	U5	9.6	5.8	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 16:51	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*34 - 120*	*01/10/20 17:35*	*01/15/20 16:51*	*1*
2-Fluorophenol	*44*		*10 - 120*	*01/10/20 17:35*	*01/15/20 16:51*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*01/10/20 17:35*	*01/15/20 16:51*	*1*
Phenol-d5	*59*		*10 - 120*	*01/10/20 17:35*	*01/15/20 16:51*	*1*
Terphenyl-d14	*62*		*53 - 125*	*01/10/20 17:35*	*01/15/20 16:51*	*1*
2,4,6-Tribromophenol	*64*		*15 - 135*	*01/10/20 17:35*	*01/15/20 16:51*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.031	0.0057	ug/L		01/10/20 09:28	01/10/20 23:51	1
1,2-Dibromoethane	ND	*	0.021	0.0052	ug/L		01/10/20 09:28	01/10/20 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*01/10/20 09:28*	*01/10/20 23:51*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6D-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 15:21	1
Acrolein	ND		20	10	ug/L			01/13/20 15:21	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 15:21	1
Benzene	0.79	J	1.0	0.38	ug/L			01/13/20 15:21	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 15:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 15:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 15:21	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 15:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 15:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 15:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 15:21	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 15:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 15:21	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 15:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 15:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 15:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 15:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 15:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 15:21	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 15:21	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 15:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 15:21	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 15:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 15:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 15:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 15:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 15:21	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 15:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 15:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 15:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 15:21	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 15:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 15:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 15:21	1

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

Job ID: 400-182304-1

Client Sample ID: MW6D-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 15:21	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 15:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 15:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 15:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 15:21	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 15:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 15:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 15:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 15:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 15:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 15:21	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 15:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 15:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 15:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 15:21	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 15:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 15:21	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*01/13/20 15:21*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*01/13/20 15:21*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/13/20 15:21*	*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		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 18:07	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:07	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*123*		*33 - 138*	*01/10/20 17:35*	*01/16/20 18:07*	*1*
2-Fluorobiphenyl	*92*		*15 - 122*	*01/10/20 17:35*	*01/16/20 18:07*	*1*

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

Job ID: 400-182304-1

Client Sample ID: MW6D-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	105		19 - 130	01/10/20 17:35	01/16/20 18:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 19:21	1
Benzenethiol	ND	* us	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 19:21	1
Benzoic acid	ND		29	7.0	ug/L		01/10/20 17:35	01/15/20 19:21	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:21	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 19:21	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 19:21	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 19:21	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/10/20 17:35	01/15/20 19:21	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 19:21	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 19:21	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:21	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 19:21	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 19:21	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 19:21	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:21	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 19:21	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 19:21	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 19:21	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 19:21	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/10/20 17:35	01/15/20 19:21	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 19:21	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 19:21	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 19:21	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:21	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 19:21	1
Hexachlorocyclopentadiene	ND	us	19	2.5	ug/L		01/10/20 17:35	01/15/20 19:21	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 19:21	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:21	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 19:21	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 19:21	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/10/20 17:35	01/15/20 19:21	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 19:21	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 19:21	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 19:21	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 19:21	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 19:21	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 19:21	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 19:21	1

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

Job ID: 400-182304-1

Client Sample ID: MW6D-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-6
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		01/10/20 17:35	01/15/20 19:21	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 19:21	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 19:21	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 19:21	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 19:21	1
Quinoline	ND	U	9.6	5.8	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 19:21	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*01/10/20 17:35*	*01/15/20 19:21*	*1*
2-Fluorophenol	*47*		*10 - 120*	*01/10/20 17:35*	*01/15/20 19:21*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*01/10/20 17:35*	*01/15/20 19:21*	*1*
Phenol-d5	*63*		*10 - 120*	*01/10/20 17:35*	*01/15/20 19:21*	*1*
Terphenyl-d14	*71*		*53 - 125*	*01/10/20 17:35*	*01/15/20 19:21*	*1*
2,4,6-Tribromophenol	*67*		*15 - 135*	*01/10/20 17:35*	*01/15/20 19:21*	*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	*	0.030	0.0055	ug/L		01/10/20 09:28	01/11/20 00:12	1
1,2-Dibromoethane	ND	*	0.020	0.0050	ug/L		01/10/20 09:28	01/11/20 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*01/10/20 09:28*	*01/11/20 00:12*	*1*

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

Job ID: 400-182304-1

Client Sample ID: TB-ROX-010820-8260-B
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 12:48	1
Acrolein	ND		20	10	ug/L			01/13/20 12:48	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 12:48	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 12:48	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 12:48	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 12:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 12:48	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 12:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 12:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 12:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 12:48	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 12:48	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 12:48	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 12:48	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 12:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 12:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 12:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 12:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 12:48	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 12:48	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 12:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 12:48	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 12:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 12:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 12:48	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 12:48	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 12:48	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 12:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 12:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 12:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 12:48	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 12:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 12:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 12:48	1

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

Job ID: 400-182304-1

Client Sample ID: TB-ROX-010820-8260-B
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 12:48	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 12:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 12:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 12:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 12:48	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 12:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 12:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 12:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 12:48	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 12:48	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 12:48	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 12:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 12:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 12:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 12:48	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 12:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 12:48	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*01/13/20 12:48*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*01/13/20 12:48*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/13/20 12:48*	*1*

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

Job ID: 400-182304-1

Client Sample ID: TB-ROX-010820-8011-B
Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-8
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		01/10/20 09:28	01/11/20 00:32	1
1,2-Dibromoethane	ND	*	0.021	0.0053	ug/L		01/10/20 09:28	01/11/20 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*01/10/20 09:28*	*01/11/20 00:32*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P93C-ROX-010820-EB
Date Collected: 01/08/20 08:40
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 13:10	1
Acrolein	ND		20	10	ug/L			01/13/20 13:10	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 13:10	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 13:10	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 13:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 13:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 13:10	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 13:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 13:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 13:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 13:10	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 13:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 13:10	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 13:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 13:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 13:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 13:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 13:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 13:10	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 13:10	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 13:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 13:10	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 13:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 13:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 13:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 13:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 13:10	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 13:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 13:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 13:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 13:10	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 13:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 13:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 13:10	1

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

Job ID: 400-182304-1

Client Sample ID: P93C-ROX-010820-EB
Date Collected: 01/08/20 08:40
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 13:10	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 13:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 13:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 13:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 13:10	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 13:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 13:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 13:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 13:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 13:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 13:10	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 13:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 13:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 13:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 13:10	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 13:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 13:10	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*01/13/20 13:10*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*01/13/20 13:10*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/13/20 13:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 16:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:33	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
1-Methylnaphthalene	0.094	J	0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1
2-Methylnaphthalene	0.10	J	0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*122*		*33 - 138*	*01/10/20 17:35*	*01/16/20 16:33*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*01/10/20 17:35*	*01/16/20 16:33*	*1*

Client Sample ID: P93C-ROX-010820-EB
Date Collected: 01/08/20 08:40
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	98		19 - 130	01/10/20 17:35	01/16/20 16:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:34	1
Benzenethiol	ND	*	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 17:34	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 17:34	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:34	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 17:34	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 17:34	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 17:34	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 17:34	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 17:34	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 17:34	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 17:34	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:34	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 17:34	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 17:34	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:34	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 17:34	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 17:34	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 17:34	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 17:34	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/10/20 17:35	01/15/20 17:34	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 17:34	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 17:34	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 17:34	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:34	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 17:34	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/10/20 17:35	01/15/20 17:34	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 17:34	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:34	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 17:34	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 17:34	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/10/20 17:35	01/15/20 17:34	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 17:34	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 17:34	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 17:34	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 17:34	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 17:34	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 17:34	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 17:34	1

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

Job ID: 400-182304-1

Client Sample ID: P93C-ROX-010820-EB
Date Collected: 01/08/20 08:40
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 17:34	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 17:34	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 17:34	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 17:34	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 17:34	1
Quinoline	ND		9.6	5.7	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 17:34	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*01/10/20 17:35*	*01/15/20 17:34*	*1*
2-Fluorophenol	*49*		*10 - 120*	*01/10/20 17:35*	*01/15/20 17:34*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*01/10/20 17:35*	*01/15/20 17:34*	*1*
Phenol-d5	*65*		*10 - 120*	*01/10/20 17:35*	*01/15/20 17:34*	*1*
Terphenyl-d14	*76*		*53 - 125*	*01/10/20 17:35*	*01/15/20 17:34*	*1*
2,4,6-Tribromophenol	*41*		*15 - 135*	*01/10/20 17:35*	*01/15/20 17:34*	*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	*	0.032	0.0059	ug/L		01/10/20 09:28	01/11/20 00:52	1
1,2-Dibromoethane	ND	*	0.022	0.0054	ug/L		01/10/20 09:28	01/11/20 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*01/10/20 09:28*	*01/11/20 00:52*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P93C-ROX-010820
Date Collected: 01/08/20 09:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 14:37	1
Acrolein	ND		20	10	ug/L			01/13/20 14:37	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 14:37	1
Benzene	0.39	J	1.0	0.38	ug/L			01/13/20 14:37	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 14:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 14:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 14:37	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 14:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 14:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 14:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 14:37	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 14:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 14:37	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 14:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 14:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 14:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 14:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 14:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 14:37	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 14:37	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 14:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 14:37	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 14:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 14:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 14:37	1
Methyl tert-butyl ether	2.9		1.0	0.74	ug/L			01/13/20 14:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 14:37	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 14:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 14:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 14:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 14:37	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 14:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 14:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 14:37	1

Client Sample ID: P93C-ROX-010820

Lab Sample ID: 400-182304-10

Date Collected: 01/08/20 09:55
Date Received: 01/09/20 09:36

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 14:37	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 14:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 14:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 14:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 14:37	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 14:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 14:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 14:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 14:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 14:37	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 14:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 14:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 14:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 14:37	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 14:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 14:37	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*01/13/20 14:37*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*01/13/20 14:37*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*01/13/20 14:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 16:52	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:52	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*113*		*33 - 138*	*01/10/20 17:35*	*01/16/20 16:52*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*01/10/20 17:35*	*01/16/20 16:52*	*1*

Client Sample ID: P93C-ROX-010820
Date Collected: 01/08/20 09:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-10
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	99		19 - 130	01/10/20 17:35	01/16/20 16:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:55	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 17:55	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 17:55	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:55	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 17:55	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 17:55	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 17:55	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 17:55	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 17:55	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 17:55	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 17:55	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:55	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 17:55	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 17:55	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:55	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 17:55	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 17:55	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 17:55	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 17:55	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/10/20 17:35	01/15/20 17:55	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 17:55	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,4-Dinitrophenol	ND	*	29	3.3	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 17:55	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 17:55	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:55	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 17:55	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 17:55	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 17:55	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:55	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 17:55	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 17:55	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/10/20 17:35	01/15/20 17:55	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 17:55	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 17:55	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 17:55	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 17:55	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 17:55	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 17:55	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 17:55	1

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

Job ID: 400-182304-1

Client Sample ID: P93C-ROX-010820
Date Collected: 01/08/20 09:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 17:55	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 17:55	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 17:55	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 17:55	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 17:55	1
Quinoline	ND	U3	9.6	5.8	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:55	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*01/10/20 17:35*	*01/15/20 17:55*	*1*
2-Fluorophenol	*52*		*10 - 120*	*01/10/20 17:35*	*01/15/20 17:55*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*01/10/20 17:35*	*01/15/20 17:55*	*1*
Phenol-d5	*64*		*10 - 120*	*01/10/20 17:35*	*01/15/20 17:55*	*1*
Terphenyl-d14	*72*		*53 - 125*	*01/10/20 17:35*	*01/15/20 17:55*	*1*
2,4,6-Tribromophenol	*67*		*15 - 135*	*01/10/20 17:35*	*01/15/20 17:55*	*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	*	0.032	0.0059	ug/L		01/10/20 09:28	01/11/20 01:13	1
1,2-Dibromoethane	ND	*	0.022	0.0054	ug/L		01/10/20 09:28	01/11/20 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/10/20 09:28*	*01/11/20 01:13*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P93D-ROX-010820
Date Collected: 01/08/20 11:20
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 14:59	1
Acrolein	ND		20	10	ug/L			01/13/20 14:59	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 14:59	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 14:59	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 14:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 14:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 14:59	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 14:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 14:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 14:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 14:59	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 14:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 14:59	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 14:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 14:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 14:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 14:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 14:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 14:59	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 14:59	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 14:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 14:59	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 14:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 14:59	1
Methyl tert-butyl ether	3.1		1.0	0.74	ug/L			01/13/20 14:59	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 14:59	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 14:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 14:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 14:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 14:59	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 14:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 14:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 14:59	1

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

Job ID: 400-182304-1

Client Sample ID: P93D-ROX-010820
Date Collected: 01/08/20 11:20
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 14:59	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 14:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 14:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 14:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 14:59	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 14:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 14:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 14:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 14:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 14:59	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 14:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 14:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 14:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 14:59	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 14:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 14:59	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*01/13/20 14:59*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*01/13/20 14:59*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*01/13/20 14:59*	*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	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 17:11	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:11	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*142*	*X*	*33 - 138*	*01/10/20 17:35*	*01/16/20 17:11*	*1*
2-Fluorobiphenyl	*103*		*15 - 122*	*01/10/20 17:35*	*01/16/20 17:11*	*1*

Client Sample ID: P93D-ROX-010820

Date Collected: 01/08/20 11:20
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	91		19 - 130	01/10/20 17:35	01/16/20 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/10/20 17:35	01/15/20 18:17	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 18:17	1
Benzoic acid	ND	* UJ	29	7.0	ug/L		01/10/20 17:35	01/15/20 18:17	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		01/10/20 17:35	01/15/20 18:17	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 18:17	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 18:17	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 18:17	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 18:17	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 18:17	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 18:17	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 18:17	1
4-Chloro-3-methylphenol	ND	UJ	9.6	3.7	ug/L		01/10/20 17:35	01/15/20 18:17	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 18:17	1
2-Chlorophenol	ND	UJ	9.6	2.1	ug/L		01/10/20 17:35	01/15/20 18:17	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 18:17	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 18:17	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 18:17	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,4-Dichlorophenol	ND	UJ	9.6	2.9	ug/L		01/10/20 17:35	01/15/20 18:17	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,4-Dimethylphenol	ND	UJ	9.6	3.4	ug/L		01/10/20 17:35	01/15/20 18:17	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/10/20 17:35	01/15/20 18:17	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 18:17	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,4-Dinitrophenol	ND	* UJ	29	3.3	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 18:17	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 18:17	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 18:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 18:17	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 18:17	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 18:17	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 18:17	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 18:17	1
2-Methylphenol	ND	UJ	9.6	1.7	ug/L		01/10/20 17:35	01/15/20 18:17	1
3 & 4 Methylphenol	ND	UJ	19	1.0	ug/L		01/10/20 17:35	01/15/20 18:17	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 18:17	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 18:17	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 18:17	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 18:17	1
2-Nitrophenol	ND	UJ	9.6	0.63	ug/L		01/10/20 17:35	01/15/20 18:17	1
4-Nitrophenol	ND	UJ	9.6	2.0	ug/L		01/10/20 17:35	01/15/20 18:17	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 18:17	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 18:17	1

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

Job ID: 400-182304-1

Client Sample ID: P93D-ROX-010820
Date Collected: 01/08/20 11:20
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 18:17	1
Pentachlorophenol	ND	UJ	19	1.7	ug/L		01/10/20 17:35	01/15/20 18:17	1
Phenol	ND	UJ	9.6	2.5	ug/L		01/10/20 17:35	01/15/20 18:17	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 18:17	1
Quinoline	ND	UJ	9.6	5.8	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,4,5-Trichlorophenol	ND	UJ	9.6	3.6	ug/L		01/10/20 17:35	01/15/20 18:17	1
2,4,6-Trichlorophenol	ND	UJ	9.6	3.4	ug/L		01/10/20 17:35	01/15/20 18:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/10/20 17:35	01/16/20 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*01/10/20 17:35*	*01/16/20 22:57*	*1*
2-Fluorophenol	*4*	*X*	*10 - 120*	*01/10/20 17:35*	*01/16/20 22:57*	*1*
Nitrobenzene-d5	*56*		*27 - 120*	*01/10/20 17:35*	*01/16/20 22:57*	*1*
Phenol-d5	*30*		*10 - 120*	*01/10/20 17:35*	*01/16/20 22:57*	*1*
Terphenyl-d14	*96*		*53 - 125*	*01/10/20 17:35*	*01/16/20 22:57*	*1*
2,4,6-Tribromophenol	*11*	*X*	*15 - 135*	*01/10/20 17:35*	*01/16/20 22:57*	*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		01/10/20 09:28	01/11/20 01:53	1
1,2-Dibromoethane	ND	*	0.020	0.0050	ug/L		01/10/20 09:28	01/11/20 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*01/10/20 09:28*	*01/11/20 01:53*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820
Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			01/13/20 17:32	500
Acrolein	ND		10000	5000	ug/L			01/13/20 17:32	500
Acrylonitrile	ND		5000	1400	ug/L			01/13/20 17:32	500
Benzene	94000		500	190	ug/L			01/13/20 17:32	500
Bromobenzene	ND		500	270	ug/L			01/13/20 17:32	500
Bromochloromethane	ND		500	260	ug/L			01/13/20 17:32	500
Bromodichloromethane	ND		500	250	ug/L			01/13/20 17:32	500
Bromoform	ND		2500	360	ug/L			01/13/20 17:32	500
Bromomethane	ND	*	500	490	ug/L			01/13/20 17:32	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/13/20 17:32	500
Carbon disulfide	ND		500	250	ug/L			01/13/20 17:32	500
Carbon tetrachloride	ND		500	250	ug/L			01/13/20 17:32	500
Chlorobenzene	ND		500	250	ug/L			01/13/20 17:32	500
Dibromochloromethane	ND		500	250	ug/L			01/13/20 17:32	500
Chloroethane	ND	*	500	380	ug/L			01/13/20 17:32	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/13/20 17:32	500
Chloroform	ND		500	300	ug/L			01/13/20 17:32	500
1-Chlorohexane	ND		500	350	ug/L			01/13/20 17:32	500
Chloromethane	ND		500	420	ug/L			01/13/20 17:32	500
cis-1,2-Dichloroethene	ND		500	250	ug/L			01/13/20 17:32	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/13/20 17:32	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/13/20 17:32	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/13/20 17:32	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/13/20 17:32	500
Dichlorodifluoromethane	ND		500	430	ug/L			01/13/20 17:32	500
1,1-Dichloroethane	ND		500	250	ug/L			01/13/20 17:32	500
1,2-Dichloroethane	ND		500	250	ug/L			01/13/20 17:32	500
1,1-Dichloroethene	ND		500	250	ug/L			01/13/20 17:32	500
1,2-Dichloropropane	ND		500	250	ug/L			01/13/20 17:32	500
1,3-Dichloropropane	ND		500	250	ug/L			01/13/20 17:32	500
2,2-Dichloropropane	ND		500	250	ug/L			01/13/20 17:32	500
1,1-Dichloropropene	ND		500	250	ug/L			01/13/20 17:32	500
Ethylbenzene	ND		500	250	ug/L			01/13/20 17:32	500
Ethyl methacrylate	ND		500	300	ug/L			01/13/20 17:32	500
Hexachlorobutadiene	ND	*	2500	450	ug/L			01/13/20 17:32	500
2-Hexanone	ND		13000	1600	ug/L			01/13/20 17:32	500
Isopropylbenzene	ND		500	270	ug/L			01/13/20 17:32	500
Methylene bromide	ND		2500	300	ug/L			01/13/20 17:32	500
Methylene Chloride	ND		2500	1500	ug/L			01/13/20 17:32	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/13/20 17:32	500
Methyl tert-butyl ether	ND		500	370	ug/L			01/13/20 17:32	500
m-Xylene & p-Xylene	ND		2500	800	ug/L			01/13/20 17:32	500
Naphthalene	ND		500	500	ug/L			01/13/20 17:32	500
n-Butylbenzene	ND		500	380	ug/L			01/13/20 17:32	500
N-Propylbenzene	ND		500	350	ug/L			01/13/20 17:32	500
o-Chlorotoluene	ND		500	290	ug/L			01/13/20 17:32	500
o-Xylene	ND		2500	300	ug/L			01/13/20 17:32	500
p-Chlorotoluene	ND		500	280	ug/L			01/13/20 17:32	500
p-Isopropyltoluene	ND		500	360	ug/L			01/13/20 17:32	500

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820
Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		500	350	ug/L			01/13/20 17:32	500
Styrene	ND		500	500	ug/L			01/13/20 17:32	500
tert-Butylbenzene	ND		500	320	ug/L			01/13/20 17:32	500
1,1,1,2-Tetrachloroethane	ND		500	260	ug/L			01/13/20 17:32	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/13/20 17:32	500
Tetrachloroethene	ND		500	290	ug/L			01/13/20 17:32	500
Toluene	ND		500	210	ug/L			01/13/20 17:32	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/13/20 17:32	500
trans-1,3-Dichloropropene	ND		2500	250	ug/L			01/13/20 17:32	500
1,2,3-Trichlorobenzene	ND		500	350	ug/L			01/13/20 17:32	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/13/20 17:32	500
1,1,1-Trichloroethane	ND		500	250	ug/L			01/13/20 17:32	500
1,1,2-Trichloroethane	ND		2500	250	ug/L			01/13/20 17:32	500
Trichloroethene	ND		500	250	ug/L			01/13/20 17:32	500
Trichlorofluoromethane	ND		500	260	ug/L			01/13/20 17:32	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/13/20 17:32	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/13/20 17:32	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/13/20 17:32	500
Vinyl acetate	ND		13000	1000	ug/L			01/13/20 17:32	500
Vinyl chloride	ND		500	250	ug/L			01/13/20 17:32	500
Xylenes, Total	ND		5000	800	ug/L			01/13/20 17:32	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*01/13/20 17:32*	*500*
Dibromofluoromethane	*98*		*81 - 121*		*01/13/20 17:32*	*500*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/13/20 17:32*	*500*

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	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 17:29	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:29	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*33 - 138*	*01/10/20 17:35*	*01/16/20 17:29*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*01/10/20 17:35*	*01/16/20 17:29*	*1*

Client Sample ID: P93B-ROX-010820
Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-12
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	99		19 - 130	01/10/20 17:35	01/16/20 17:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/10/20 17:35	01/15/20 18:38	1
Benzenethiol	ND	*	9.5	1.6	ug/L		01/10/20 17:35	01/15/20 18:38	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 18:38	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/10/20 17:35	01/15/20 18:38	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		01/10/20 17:35	01/15/20 18:38	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		01/10/20 17:35	01/15/20 18:38	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		01/10/20 17:35	01/15/20 18:38	1
Bis(2-ethylhexyl) phthalate	ND	*	9.5	4.8	ug/L		01/10/20 17:35	01/15/20 18:38	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		01/10/20 17:35	01/15/20 18:38	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		01/10/20 17:35	01/15/20 18:38	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/10/20 17:35	01/15/20 18:38	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/10/20 17:35	01/15/20 18:38	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		01/10/20 17:35	01/15/20 18:38	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/10/20 17:35	01/15/20 18:38	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/10/20 17:35	01/15/20 18:38	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		01/10/20 17:35	01/15/20 18:38	1
Dibenzofuran	ND		9.5	0.50	ug/L		01/10/20 17:35	01/15/20 18:38	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/10/20 17:35	01/15/20 18:38	1
Diethyl phthalate	ND		9.5	0.67	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/10/20 17:35	01/15/20 18:38	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		01/10/20 17:35	01/15/20 18:38	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/10/20 17:35	01/15/20 18:38	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,4-Dinitrophenol	ND	*	29	3.2	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/10/20 17:35	01/15/20 18:38	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		01/10/20 17:35	01/15/20 18:38	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/10/20 17:35	01/15/20 18:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/10/20 17:35	01/15/20 18:38	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		01/10/20 17:35	01/15/20 18:38	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/10/20 17:35	01/15/20 18:38	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/10/20 17:35	01/15/20 18:38	1
Indene	ND		9.5	0.95	ug/L		01/10/20 17:35	01/15/20 18:38	1
Isophorone	ND		9.5	0.54	ug/L		01/10/20 17:35	01/15/20 18:38	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/10/20 17:35	01/15/20 18:38	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/10/20 17:35	01/15/20 18:38	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/10/20 17:35	01/15/20 18:38	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/10/20 17:35	01/15/20 18:38	1
4-Nitroaniline	ND		9.5	2.4	ug/L		01/10/20 17:35	01/15/20 18:38	1
Nitrobenzene	ND		9.5	0.52	ug/L		01/10/20 17:35	01/15/20 18:38	1
2-Nitrophenol	ND		9.5	0.62	ug/L		01/10/20 17:35	01/15/20 18:38	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/10/20 17:35	01/15/20 18:38	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/10/20 17:35	01/15/20 18:38	1

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820
Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/10/20 17:35	01/15/20 18:38	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		01/10/20 17:35	01/15/20 18:38	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 18:38	1
Pyridine	ND		9.5	3.1	ug/L		01/10/20 17:35	01/15/20 18:38	1
Quinoline	ND	U5	9.5	5.7	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/10/20 17:35	01/15/20 18:38	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/10/20 17:35	01/15/20 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*34 - 120*	*01/10/20 17:35*	*01/15/20 18:38*	*1*
2-Fluorophenol	*48*		*10 - 120*	*01/10/20 17:35*	*01/15/20 18:38*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*01/10/20 17:35*	*01/15/20 18:38*	*1*
Phenol-d5	*61*		*10 - 120*	*01/10/20 17:35*	*01/15/20 18:38*	*1*
Terphenyl-d14	*50*	*X*	*53 - 125*	*01/10/20 17:35*	*01/15/20 18:38*	*1*
2,4,6-Tribromophenol	*66*		*15 - 135*	*01/10/20 17:35*	*01/15/20 18:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	190	J	48	12	ug/L		01/10/20 17:35	01/16/20 23:22	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	*	0.038	0.0070	ug/L		01/10/20 09:28	01/11/20 02:13	1
1,2-Dibromoethane	ND	*	0.025	0.0063	ug/L		01/10/20 09:28	01/11/20 02:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*01/10/20 09:28*	*01/11/20 02:13*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820-DUP
Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			01/13/20 17:54	500
Acrolein	ND		10000	5000	ug/L			01/13/20 17:54	500
Acrylonitrile	ND		5000	1400	ug/L			01/13/20 17:54	500
Benzene	100000		500	190	ug/L			01/13/20 17:54	500
Bromobenzene	ND		500	270	ug/L			01/13/20 17:54	500
Bromochloromethane	ND		500	260	ug/L			01/13/20 17:54	500
Bromodichloromethane	ND		500	250	ug/L			01/13/20 17:54	500
Bromoform	ND		2500	360	ug/L			01/13/20 17:54	500
Bromomethane	ND	*	500	490	ug/L			01/13/20 17:54	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/13/20 17:54	500
Carbon disulfide	ND		500	250	ug/L			01/13/20 17:54	500
Carbon tetrachloride	ND		500	250	ug/L			01/13/20 17:54	500
Chlorobenzene	ND		500	250	ug/L			01/13/20 17:54	500
Dibromochloromethane	ND		500	250	ug/L			01/13/20 17:54	500
Chloroethane	ND	*	500	380	ug/L			01/13/20 17:54	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/13/20 17:54	500
Chloroform	ND		500	300	ug/L			01/13/20 17:54	500
1-Chlorohexane	ND		500	350	ug/L			01/13/20 17:54	500
Chloromethane	ND		500	420	ug/L			01/13/20 17:54	500
cis-1,2-Dichloroethene	ND		500	250	ug/L			01/13/20 17:54	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/13/20 17:54	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/13/20 17:54	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/13/20 17:54	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/13/20 17:54	500
Dichlorodifluoromethane	ND		500	430	ug/L			01/13/20 17:54	500
1,1-Dichloroethane	ND		500	250	ug/L			01/13/20 17:54	500
1,2-Dichloroethane	ND		500	250	ug/L			01/13/20 17:54	500
1,1-Dichloroethene	ND		500	250	ug/L			01/13/20 17:54	500
1,2-Dichloropropane	ND		500	250	ug/L			01/13/20 17:54	500
1,3-Dichloropropane	ND		500	250	ug/L			01/13/20 17:54	500
2,2-Dichloropropane	ND		500	250	ug/L			01/13/20 17:54	500
1,1-Dichloropropene	ND		500	250	ug/L			01/13/20 17:54	500
Ethylbenzene	ND		500	250	ug/L			01/13/20 17:54	500
Ethyl methacrylate	ND		500	300	ug/L			01/13/20 17:54	500
Hexachlorobutadiene	ND	*	2500	450	ug/L			01/13/20 17:54	500
2-Hexanone	ND		13000	1600	ug/L			01/13/20 17:54	500
Isopropylbenzene	ND		500	270	ug/L			01/13/20 17:54	500
Methylene bromide	ND		2500	300	ug/L			01/13/20 17:54	500
Methylene Chloride	ND		2500	1500	ug/L			01/13/20 17:54	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/13/20 17:54	500
Methyl tert-butyl ether	ND		500	370	ug/L			01/13/20 17:54	500
m-Xylene & p-Xylene	ND		2500	800	ug/L			01/13/20 17:54	500
Naphthalene	ND		500	500	ug/L			01/13/20 17:54	500
n-Butylbenzene	ND		500	380	ug/L			01/13/20 17:54	500
N-Propylbenzene	ND		500	350	ug/L			01/13/20 17:54	500
o-Chlorotoluene	ND		500	290	ug/L			01/13/20 17:54	500
o-Xylene	ND		2500	300	ug/L			01/13/20 17:54	500
p-Chlorotoluene	ND		500	280	ug/L			01/13/20 17:54	500
p-Isopropyltoluene	ND		500	360	ug/L			01/13/20 17:54	500

Client Sample ID: P93B-ROX-010820-DUP
Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		500	350	ug/L			01/13/20 17:54	500
Styrene	ND		500	500	ug/L			01/13/20 17:54	500
tert-Butylbenzene	ND		500	320	ug/L			01/13/20 17:54	500
1,1,1,2-Tetrachloroethane	ND		500	260	ug/L			01/13/20 17:54	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/13/20 17:54	500
Tetrachloroethene	ND		500	290	ug/L			01/13/20 17:54	500
Toluene	ND		500	210	ug/L			01/13/20 17:54	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/13/20 17:54	500
trans-1,3-Dichloropropene	ND		2500	250	ug/L			01/13/20 17:54	500
1,2,3-Trichlorobenzene	ND		500	350	ug/L			01/13/20 17:54	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/13/20 17:54	500
1,1,1-Trichloroethane	ND		500	250	ug/L			01/13/20 17:54	500
1,1,2-Trichloroethane	ND		2500	250	ug/L			01/13/20 17:54	500
Trichloroethene	ND		500	250	ug/L			01/13/20 17:54	500
Trichlorofluoromethane	ND		500	260	ug/L			01/13/20 17:54	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/13/20 17:54	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/13/20 17:54	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/13/20 17:54	500
Vinyl acetate	ND		13000	1000	ug/L			01/13/20 17:54	500
Vinyl chloride	ND		500	250	ug/L			01/13/20 17:54	500
Xylenes, Total	ND		5000	800	ug/L			01/13/20 17:54	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*01/13/20 17:54*	*500*
Dibromofluoromethane	*98*		*81 - 121*		*01/13/20 17:54*	*500*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/13/20 17:54*	*500*

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	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 17:48	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 17:48	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*01/10/20 17:35*	*01/16/20 17:48*	*1*
2-Fluorobiphenyl	*52*		*15 - 122*	*01/10/20 17:35*	*01/16/20 17:48*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820-DUP

Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-13
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57		19 - 130	01/10/20 17:35	01/16/20 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.6	3.6	ug/L		01/10/20 17:35	01/15/20 19:00	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 19:00	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 19:00	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:00	1
Bis(2-chloroethoxy)methane	ND	UJ	9.6	0.66	ug/L		01/10/20 17:35	01/15/20 19:00	1
Bis(2-chloroethyl)ether	ND	UJ	9.6	0.71	ug/L		01/10/20 17:35	01/15/20 19:00	1
bis (2-chloroisopropyl) ether	ND	UJ	9.6	0.77	ug/L		01/10/20 17:35	01/15/20 19:00	1
Bis(2-ethylhexyl) phthalate	ND	* UJ	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 19:00	1
4-Bromophenyl phenyl ether	ND	UJ	9.6	0.31	ug/L		01/10/20 17:35	01/15/20 19:00	1
Butyl benzyl phthalate	ND	UJ	9.6	0.66	ug/L		01/10/20 17:35	01/15/20 19:00	1
4-Chloroaniline	ND	UJ	9.6	3.2	ug/L		01/10/20 17:35	01/15/20 19:00	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 19:00	1
2-Chloronaphthalene	ND	UJ	9.6	0.50	ug/L		01/10/20 17:35	01/15/20 19:00	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 19:00	1
4-Chlorophenyl phenyl ether	ND	UJ	9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:00	1
Dibenz[a,h]acridine	ND	UJ	9.6	2.9	ug/L		01/10/20 17:35	01/15/20 19:00	1
Dibenzofuran	ND	UJ	9.6	0.50	ug/L		01/10/20 17:35	01/15/20 19:00	1
3,3'-Dichlorobenzidine	ND	UJ	9.6	2.5	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 19:00	1
Diethyl phthalate	ND	UJ	9.6	0.67	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:00	1
Dimethyl phthalate	ND	UJ	9.6	0.57	ug/L		01/10/20 17:35	01/15/20 19:00	1
Di-n-butyl phthalate	ND	UJ	9.6	2.6	ug/L		01/10/20 17:35	01/15/20 19:00	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,4-Dinitrophenol	ND	*	29	3.2	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,4-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/10/20 17:35	01/15/20 19:00	1
Di-n-octyl phthalate	ND	UJ	9.6	0.42	ug/L		01/10/20 17:35	01/15/20 19:00	1
1,4-Dioxane	ND	UJ	9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:00	1
Hexachlorobenzene	ND	UJ	9.6	0.24	ug/L		01/10/20 17:35	01/15/20 19:00	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 19:00	1
Hexachloroethane	ND	UJ	9.6	4.0	ug/L		01/10/20 17:35	01/15/20 19:00	1
Indene	ND	UJ	9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:00	1
Isophorone	ND	UJ	9.6	0.54	ug/L		01/10/20 17:35	01/15/20 19:00	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 19:00	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/10/20 17:35	01/15/20 19:00	1
2-Nitroaniline	ND	UJ	9.6	2.1	ug/L		01/10/20 17:35	01/15/20 19:00	1
3-Nitroaniline	ND	UJ	9.6	1.7	ug/L		01/10/20 17:35	01/15/20 19:00	1
4-Nitroaniline	ND	UJ	9.6	2.4	ug/L		01/10/20 17:35	01/15/20 19:00	1
Nitrobenzene	ND	UJ	9.6	0.53	ug/L		01/10/20 17:35	01/15/20 19:00	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 19:00	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 19:00	1
N-Nitrosodimethylamine	ND	UJ	9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:00	1

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

Job ID: 400-182304-1

Client Sample ID: P93B-ROX-010820-DUP

Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND	UJ	9.6	3.2	ug/L		01/10/20 17:35	01/15/20 19:00	1
N-Nitrosodiphenylamine	ND	UJ	9.6	0.45	ug/L		01/10/20 17:35	01/15/20 19:00	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 19:00	1
Pyridine	ND	UJ	9.6	3.1	ug/L		01/10/20 17:35	01/15/20 19:00	1
Quinoline	ND	UJ	9.6	5.7	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 19:00	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*32*	*X*	*34 - 120*	*01/10/20 17:35*	*01/15/20 19:00*	*1*
2-Fluorophenol	*26*		*10 - 120*	*01/10/20 17:35*	*01/15/20 19:00*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*01/10/20 17:35*	*01/15/20 19:00*	*1*
Phenol-d5	*38*		*10 - 120*	*01/10/20 17:35*	*01/15/20 19:00*	*1*
Terphenyl-d14	*39*	*X*	*53 - 125*	*01/10/20 17:35*	*01/15/20 19:00*	*1*
2,4,6-Tribromophenol	*40*		*15 - 135*	*01/10/20 17:35*	*01/15/20 19:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	90	J	48	12	ug/L		01/10/20 17:35	01/16/20 23:46	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		01/10/20 09:28	01/11/20 02:34	1
1,2-Dibromoethane	ND	*	0.020	0.0050	ug/L		01/10/20 09:28	01/11/20 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/10/20 09:28*	*01/11/20 02:34*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P56-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 14:16	1
Acrolein	ND		20	10	ug/L			01/13/20 14:16	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 14:16	1
Benzene	1.4		1.0	0.38	ug/L			01/13/20 14:16	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 14:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 14:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 14:16	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 14:16	1
2-Butanone (MEK)	9.4	J	25	2.6	ug/L			01/13/20 14:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 14:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 14:16	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 14:16	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 14:16	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 14:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 14:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 14:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 14:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Ethylbenzene	1.7		1.0	0.50	ug/L			01/13/20 14:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 14:16	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 14:16	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 14:16	1
Isopropylbenzene	20		1.0	0.53	ug/L			01/13/20 14:16	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 14:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 14:16	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 14:16	1
m-Xylene & p-Xylene	6.2		5.0	1.6	ug/L			01/13/20 14:16	1
Naphthalene	1.8		1.0	1.0	ug/L			01/13/20 14:16	1
n-Butylbenzene	0.94	J	1.0	0.76	ug/L			01/13/20 14:16	1
N-Propylbenzene	21		1.0	0.69	ug/L			01/13/20 14:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 14:16	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 14:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 14:16	1
p-Isopropyltoluene	1.1		1.0	0.71	ug/L			01/13/20 14:16	1
sec-Butylbenzene	2.0		1.0	0.70	ug/L			01/13/20 14:16	1

Client Sample ID: P56-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	1.0	ug/L			01/13/20 14:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 14:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 14:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 14:16	1
Toluene	0.61	J	1.0	0.41	ug/L			01/13/20 14:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 14:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 14:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 14:16	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 14:16	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 14:16	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 14:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 14:16	1
1,2,4-Trimethylbenzene	1.5		1.0	0.82	ug/L			01/13/20 14:16	1
1,3,5-Trimethylbenzene	0.65	J	1.0	0.56	ug/L			01/13/20 14:16	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 14:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 14:16	1
Xylenes, Total	6.5	J	10	1.6	ug/L			01/13/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*01/13/20 14:16*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*01/13/20 14:16*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/13/20 14:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.60	ug/L			01/15/20 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*01/15/20 22:31*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*01/15/20 22:31*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*01/15/20 22:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.52		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 16:14	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 16:14	1

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

Job ID: 400-182304-1

Client Sample ID: P56-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
1-Methylnaphthalene	25		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1
2-Methylnaphthalene	19		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*33 - 138*	*01/10/20 17:35*	*01/16/20 16:14*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*01/10/20 17:35*	*01/16/20 16:14*	*1*
Nitrobenzene-d5	*125*		*19 - 130*	*01/10/20 17:35*	*01/16/20 16:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:12	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 17:12	1
Benzoic acid	ND		29	7.0	ug/L		01/10/20 17:35	01/15/20 17:12	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:12	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 17:12	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 17:12	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/10/20 17:35	01/15/20 17:12	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/10/20 17:35	01/15/20 17:12	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 17:12	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 17:12	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 17:12	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 17:12	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 17:12	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 17:12	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:12	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 17:12	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 17:12	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 17:12	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 17:12	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/10/20 17:35	01/15/20 17:12	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 17:12	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 17:12	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 17:12	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:12	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 17:12	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 17:12	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 17:12	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 17:12	1
Isophorone	ND		9.6	0.55	ug/L		01/10/20 17:35	01/15/20 17:12	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 17:12	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/10/20 17:35	01/15/20 17:12	1

Client Sample ID: P56-ROX-010820
Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 17:12	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 17:12	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 17:12	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 17:12	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 17:12	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 17:12	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 17:12	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 17:12	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 17:12	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 17:12	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 17:12	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 17:12	1
Quinoline	ND	u5	9.6	5.7	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 17:12	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/10/20 17:35	01/15/20 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*34 - 120*	*01/10/20 17:35*	*01/15/20 17:12*	*1*
2-Fluorophenol	*41*		*10 - 120*	*01/10/20 17:35*	*01/15/20 17:12*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*01/10/20 17:35*	*01/15/20 17:12*	*1*
Phenol-d5	*58*		*10 - 120*	*01/10/20 17:35*	*01/15/20 17:12*	*1*
Terphenyl-d14	*56*		*53 - 125*	*01/10/20 17:35*	*01/15/20 17:12*	*1*
2,4,6-Tribromophenol	*67*		*15 - 135*	*01/10/20 17:35*	*01/15/20 17:12*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.031	0.0057	ug/L		01/10/20 09:28	01/11/20 02:54	1
1,2-Dibromoethane	ND	*	0.021	0.0052	ug/L		01/10/20 09:28	01/11/20 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*01/10/20 09:28*	*01/11/20 02:54*	*1*

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

Job ID: 400-182304-1

Client Sample ID: P74-ROX-010820
Date Collected: 01/08/20 13:30
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 15:43	1
Acrolein	ND		20	10	ug/L			01/13/20 15:43	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 15:43	1
Benzene	14		1.0	0.38	ug/L			01/13/20 15:43	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 15:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 15:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 15:43	1
Bromomethane	ND	*	1.0	0.98	ug/L			01/13/20 15:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 15:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Chloroethane	ND	*	1.0	0.76	ug/L			01/13/20 15:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 15:43	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 15:43	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 15:43	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 15:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 15:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 15:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 15:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 15:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 15:43	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/L			01/13/20 15:43	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 15:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 15:43	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 15:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 15:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 15:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 15:43	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 15:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 15:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 15:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 15:43	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 15:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 15:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 15:43	1

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

Job ID: 400-182304-1

Client Sample ID: P74-ROX-010820
Date Collected: 01/08/20 13:30
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 15:43	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 15:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 15:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 15:43	1
Toluene	0.50	J	1.0	0.41	ug/L			01/13/20 15:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 15:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 15:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 15:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 15:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 15:43	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 15:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 15:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 15:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 15:43	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 15:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 15:43	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*01/13/20 15:43*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*01/13/20 15:43*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/13/20 15:43*	*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	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
Anthracene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Chrysene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Fluoranthene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
Fluorene	ND		0.19	0.020	ug/L		01/10/20 17:35	01/16/20 18:26	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/10/20 17:35	01/16/20 18:26	1
Phenanthrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
Pyrene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/10/20 17:35	01/16/20 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*123*		*33 - 138*	*01/10/20 17:35*	*01/16/20 18:26*	*1*
2-Fluorobiphenyl	*85*		*15 - 122*	*01/10/20 17:35*	*01/16/20 18:26*	*1*

Client Sample ID: P74-ROX-010820
Date Collected: 01/08/20 13:30
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-15
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	99		19 - 130	01/10/20 17:35	01/16/20 18:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 19:43	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/10/20 17:35	01/15/20 19:43	1
Benzoic acid	ND	*	29	7.0	ug/L		01/10/20 17:35	01/15/20 19:43	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:43	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 19:43	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/10/20 17:35	01/15/20 19:43	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/10/20 17:35	01/15/20 19:43	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		01/10/20 17:35	01/15/20 19:43	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/10/20 17:35	01/15/20 19:43	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/10/20 17:35	01/15/20 19:43	1
4-Chloroaniline	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 19:43	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/10/20 17:35	01/15/20 19:43	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 19:43	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 19:43	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:43	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 19:43	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/10/20 17:35	01/15/20 19:43	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/10/20 17:35	01/15/20 19:43	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:43	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/10/20 17:35	01/15/20 19:43	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/10/20 17:35	01/15/20 19:43	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,4-Dinitrophenol	ND	*	29	3.2	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/10/20 17:35	01/15/20 19:43	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/10/20 17:35	01/15/20 19:43	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:43	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/10/20 17:35	01/15/20 19:43	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/10/20 17:35	01/15/20 19:43	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/10/20 17:35	01/15/20 19:43	1
Indene	ND		9.6	0.96	ug/L		01/10/20 17:35	01/15/20 19:43	1
Isophorone	ND		9.6	0.54	ug/L		01/10/20 17:35	01/15/20 19:43	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 19:43	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/10/20 17:35	01/15/20 19:43	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/10/20 17:35	01/15/20 19:43	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/10/20 17:35	01/15/20 19:43	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/10/20 17:35	01/15/20 19:43	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/10/20 17:35	01/15/20 19:43	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/10/20 17:35	01/15/20 19:43	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/10/20 17:35	01/15/20 19:43	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:43	1

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

Job ID: 400-182304-1

Client Sample ID: P74-ROX-010820
Date Collected: 01/08/20 13:30
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/10/20 17:35	01/15/20 19:43	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/10/20 17:35	01/15/20 19:43	1
Pentachlorophenol	ND		19	1.7	ug/L		01/10/20 17:35	01/15/20 19:43	1
Phenol	ND		9.6	2.5	ug/L		01/10/20 17:35	01/15/20 19:43	1
Pyridine	ND		9.6	3.1	ug/L		01/10/20 17:35	01/15/20 19:43	1
Quinoline	ND	U5	9.6	5.7	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/10/20 17:35	01/15/20 19:43	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/10/20 17:35	01/15/20 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*34 - 120*	*01/10/20 17:35*	*01/15/20 19:43*	*1*
2-Fluorophenol	*45*		*10 - 120*	*01/10/20 17:35*	*01/15/20 19:43*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*01/10/20 17:35*	*01/15/20 19:43*	*1*
Phenol-d5	*64*		*10 - 120*	*01/10/20 17:35*	*01/15/20 19:43*	*1*
Terphenyl-d14	*83*		*53 - 125*	*01/10/20 17:35*	*01/15/20 19:43*	*1*
2,4,6-Tribromophenol	*68*		*15 - 135*	*01/10/20 17:35*	*01/15/20 19:43*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.031	0.0057	ug/L		01/10/20 09:28	01/11/20 03:14	1
1,2-Dibromoethane	ND	*	0.021	0.0052	ug/L		01/10/20 09:28	01/11/20 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*01/10/20 09:28*	*01/11/20 03:14*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery 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
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance 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.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
F1	MS and/or MSD Recovery 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: 400-182304-1

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)
400-182304-1	TB-ROXX-010820-8260-A	97	95	99
400-182304-3	MW6A-ROX-010820	90	91	94
400-182304-3 MS	MW6A-ROX-010820	85	94	88
400-182304-3 MSD	MW6A-ROX-010820	88	98	90
400-182304-4	MW6B-ROX-010820	96	96	91
400-182304-5	MW6C-ROX-010820	97	93	97
400-182304-6	MW6D-ROX-010820	95	98	97
400-182304-7	TB-ROX-010820-8260-B	94	91	96
400-182304-9	P93C-ROX-010820-EB	100	95	89
400-182304-10	P93C-ROX-010820	92	96	94
400-182304-11	P93D-ROX-010820	98	95	86
400-182304-12	P93B-ROX-010820	96	98	93
400-182304-13	P93B-ROX-010820-DUP	93	98	89
400-182304-14	P56-ROX-010820	100	96	98
400-182304-14 - RA	P56-ROX-010820	109	93	106
400-182304-15	P74-ROX-010820	93	92	96
LCS 400-473735/1002	Lab Control Sample	87	97	88
LCS 400-474055/1002	Lab Control Sample	111	90	111
MB 400-473735/4	Method Blank	91	92	88
MB 400-474055/4	Method Blank	105	91	111

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)
400-182304-3	MW6A-ROX-010820	61	2 X	18 X	17	80	15
400-182304-3 MS	MW6A-ROX-010820	60	48	74	65	58	66
400-182304-3 MSD	MW6A-ROX-010820	46	0.2 X	3 X	2 X	50 X	0 X
400-182304-4	MW6B-ROX-010820	54	38	66	56	69	62
400-182304-5	MW6C-ROX-010820	51	44	62	59	62	64
400-182304-6	MW6D-ROX-010820	55	47	66	63	71	67
400-182304-9	P93C-ROX-010820-EB	55	49	69	65	76	41
400-182304-10	P93C-ROX-010820	57	52	69	64	72	67
400-182304-11 - RA	P93D-ROX-010820	75	4 X	56	30	96	11 X
400-182304-12	P93B-ROX-010820	53	48	67	61	50 X	66
400-182304-13	P93B-ROX-010820-DUP	32 X	26	43	38	39 X	40
400-182304-14	P56-ROX-010820	50	41	69	58	56	67
400-182304-15	P74-ROX-010820	59	45	71	64	83	68
LCS 400-473677/2-A	Lab Control Sample	75	62	80	77	92	89
LCS 400-473677/4-A	Lab Control Sample	57	35	75	62	79	27
LCSD 400-473677/3-A	Lab Control Sample Dup	83	67	86	83	100	99
LCSD 400-473677/5-A	Lab Control Sample Dup	55	57	72	70	77	47
MB 400-473677/1-A	Method Blank	52	41	67	62	70	44

Surrogate Summary

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

Job ID: 400-182304-1

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)**
400-182304-3	MW6A-ROX-010820	120	79	23
400-182304-3 MS	MW6A-ROX-010820	80	69	84
400-182304-3 MSD	MW6A-ROX-010820	78	61	3 X
400-182304-4	MW6B-ROX-010820	125	89	107
400-182304-5	MW6C-ROX-010820	113	79	94
400-182304-6	MW6D-ROX-010820	123	92	105
400-182304-9	P93C-ROX-010820-EB	122	83	98
400-182304-10	P93C-ROX-010820	113	86	99
400-182304-11	P93D-ROX-010820	142 X	103	91
400-182304-12	P93B-ROX-010820	93	83	99
400-182304-13	P93B-ROX-010820-DUP	62	52	57
400-182304-14	P56-ROX-010820	104	83	125
400-182304-15	P74-ROX-010820	123	85	99
LCS 400-473677/2-A	Lab Control Sample	103	80	93
LCSD 400-473677/3-A	Lab Control Sample Dup	97	70	88
MB 400-473677/1-A	Method Blank	126	86	99

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)**
400-182304-2	TB-ROXX-010820-8011-A	100
400-182304-3	MW6A-ROX-010820	90
400-182304-3 MS	MW6A-ROX-010820	98
400-182304-3 MSD	MW6A-ROX-010820	102
400-182304-4	MW6B-ROX-010820	96
400-182304-5	MW6C-ROX-010820	103
400-182304-6	MW6D-ROX-010820	100
400-182304-8	TB-ROX-010820-8011-B	91
400-182304-9	P93C-ROX-010820-EB	95
400-182304-10	P93C-ROX-010820	93
400-182304-11	P93D-ROX-010820	100
400-182304-12	P93B-ROX-010820	105
400-182304-13	P93B-ROX-010820-DUP	93
400-182304-14	P56-ROX-010820	94
400-182304-15	P74-ROX-010820	97

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-182304-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
LCS 400-473548/2-A	Lab Control Sample	73
LCSD 400-473548/3-A	Lab Control Sample Dup	101
MB 400-473548/1-A	Method Blank	74

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-182304-1

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-ROXX-010820-8260-A

Lab Sample ID: 400-182304-1
Matrix: Water

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 12:26	AMB	TAL PEN

Client Sample ID: TB-ROXX-010820-8011-A

Lab Sample ID: 400-182304-2
Matrix: Water

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.1 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 22:10	DS	TAL PEN

Client Sample ID: MW6A-ROX-010820

Lab Sample ID: 400-182304-3
Matrix: Water

Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 09:31	AMB	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 15:25	KJA	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 14:40	PP1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 22:30	DS	TAL PEN

Client Sample ID: MW6B-ROX-010820

Lab Sample ID: 400-182304-4
Matrix: Water

Date Collected: 01/08/20 10:05
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 13:32	AMB	TAL PEN
Total/NA	Prep	3520C	RA		1042.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			476857	02/06/20 14:40	VC1	TAL PEN
Total/NA	Prep	3520C			1042.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 16:29	KJA	TAL PEN
Total/NA	Prep	3520C			1042.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 15:36	PP1	TAL PEN
Total/NA	Prep	8011			33.6 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 23:31	DS	TAL PEN

Client Sample ID: MW6C-ROX-010820

Lab Sample ID: 400-182304-5
Matrix: Water

Date Collected: 01/08/20 10:55
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 13:54	AMB	TAL PEN

Client Sample ID: MW6C-ROX-010820

Lab Sample ID: 400-182304-5
Matrix: Water

Date Collected: 01/08/20 10:55
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1041.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 16:51	KJA	TAL PEN
Total/NA	Prep	3520C			1041.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 15:55	PP1	TAL PEN
Total/NA	Prep	8011			33.6 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 23:51	DS	TAL PEN

Client Sample ID: MW6D-ROX-010820

Lab Sample ID: 400-182304-6
Matrix: Water

Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 15:21	AMB	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	474099	01/15/20 19:21	KJA	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 18:07	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 00:12	DS	TAL PEN

Client Sample ID: TB-ROX-010820-8260-B

Lab Sample ID: 400-182304-7
Matrix: Water

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 12:48	AMB	TAL PEN

Client Sample ID: TB-ROX-010820-8011-B

Lab Sample ID: 400-182304-8
Matrix: Water

Date Collected: 01/08/20 00:00
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.3 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 00:32	DS	TAL PEN

Client Sample ID: P93C-ROX-010820-EB

Lab Sample ID: 400-182304-9
Matrix: Water

Date Collected: 01/08/20 08:40
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 13:10	AMB	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 17:34	KJA	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 16:33	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-182304-1

Client Sample ID: P93C-ROX-010820-EB

Lab Sample ID: 400-182304-9
Matrix: Water

Date Collected: 01/08/20 08:40
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.4 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 00:52	DS	TAL PEN

Client Sample ID: P93C-ROX-010820

Lab Sample ID: 400-182304-10
Matrix: Water

Date Collected: 01/08/20 09:55
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 14:37	AMB	TAL PEN
Total/NA	Prep	3520C			1042.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 17:55	KJA	TAL PEN
Total/NA	Prep	3520C			1042.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 16:52	PP1	TAL PEN
Total/NA	Prep	8011			32.4 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 01:13	DS	TAL PEN

Client Sample ID: P93D-ROX-010820

Lab Sample ID: 400-182304-11
Matrix: Water

Date Collected: 01/08/20 11:20
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 14:59	AMB	TAL PEN
Total/NA	Prep	3520C			1039.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 18:17	KJA	TAL PEN
Total/NA	Prep	3520C	RA		1039.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474338	01/16/20 22:57	DS	TAL PEN
Total/NA	Prep	3520C			1039.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 17:11	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 01:53	DS	TAL PEN

Client Sample ID: P93B-ROX-010820

Lab Sample ID: 400-182304-12
Matrix: Water

Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	473735	01/13/20 17:32	AMB	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 18:38	KJA	TAL PEN
Total/NA	Prep	3520C	DL		1048.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D	DL	5			474338	01/16/20 23:22	DS	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 17:29	PP1	TAL PEN
Total/NA	Prep	8011			27.6 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 02:13	DS	TAL PEN

Client Sample ID: P93B-ROX-010820-DUP

Lab Sample ID: 400-182304-13

Date Collected: 01/08/20 10:25
Date Received: 01/09/20 09:36

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	473735	01/13/20 17:54	AMB	TAL PEN
Total/NA	Prep	3520C			1046.4 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 19:00	KJA	TAL PEN
Total/NA	Prep	3520C	DL		1046.4 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D	DL	5			474338	01/16/20 23:46	DS	TAL PEN
Total/NA	Prep	3520C			1046.4 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 17:48	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 02:34	DS	TAL PEN

Client Sample ID: P56-ROX-010820

Lab Sample ID: 400-182304-14

Date Collected: 01/08/20 12:15
Date Received: 01/09/20 09:36

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	473735	01/13/20 14:16	AMB	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	474055	01/15/20 22:31	AMB	TAL PEN
Total/NA	Prep	3520C			1044 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	474099	01/15/20 17:12	KJA	TAL PEN
Total/NA	Prep	3520C			1044 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 16:14	PP1	TAL PEN
Total/NA	Prep	8011			33.6 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 02:54	DS	TAL PEN

Client Sample ID: P74-ROX-010820

Lab Sample ID: 400-182304-15

Date Collected: 01/08/20 13:30
Date Received: 01/09/20 09:36

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	473735	01/13/20 15:43	AMB	TAL PEN
Total/NA	Prep	3520C			1046.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 19:43	KJA	TAL PEN
Total/NA	Prep	3520C			1046.2 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 18:26	PP1	TAL PEN
Total/NA	Prep	8011			33.5 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/11/20 03:14	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473548/1-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	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 20:07	DS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-473677/1-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 13:59	KJA	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474274	01/16/20 13:25	PP1	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-473735/4**
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	473735	01/13/20 09:09	AMB	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-474055/4**
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	474055	01/15/20 13:31	AMB	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-473548/2-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	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 20:27	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-473677/2-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			473927	01/14/20 15:48	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474274	01/16/20 13:43	PP1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-473677/4-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 14:20	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-473735/1002**
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	473735	01/13/20 08:12	AMB	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-474055/1002**
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	474055	01/15/20 12:23	AMB	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-473548/3-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	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 20:48	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-473677/3-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			473927	01/14/20 16:10	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474274	01/16/20 14:02	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-473677/5-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	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 14:42	KJA	TAL PEN

Client Sample ID: MW6A-ROX-010820 — **Lab Sample ID: 400-182304-3 MS**
Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36
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	473735	01/13/20 10:59	AMB	TAL PEN
Total/NA	Prep	3520C			1034.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 15:46	KJA	TAL PEN
Total/NA	Prep	3520C			1034.6 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474274	01/16/20 14:59	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-182304-1

Client Sample ID: MW6A-ROX-010820

Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-3 MS

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.1 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 22:50	DS	TAL PEN

Client Sample ID: MW6A-ROX-010820

Date Collected: 01/08/20 08:55
Date Received: 01/09/20 09:36

Lab Sample ID: 400-182304-3 MSD

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	473735	01/13/20 11:21	AMB	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474099	01/15/20 16:08	KJA	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	473677	01/10/20 17:35	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474274	01/16/20 15:18	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	473548	01/10/20 09:28	TMB	TAL PEN
Total/NA	Analysis	8011		1			473595	01/10/20 23:11	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: 473735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-1	TB-ROXX-010820-8260-A	Total/NA	Water	8260B	
400-182304-3	MW6A-ROX-010820	Total/NA	Water	8260B	
400-182304-4	MW6B-ROX-010820	Total/NA	Water	8260B	
400-182304-5	MW6C-ROX-010820	Total/NA	Water	8260B	
400-182304-6	MW6D-ROX-010820	Total/NA	Water	8260B	
400-182304-7	TB-ROX-010820-8260-B	Total/NA	Water	8260B	
400-182304-9	P93C-ROX-010820-EB	Total/NA	Water	8260B	
400-182304-10	P93C-ROX-010820	Total/NA	Water	8260B	
400-182304-11	P93D-ROX-010820	Total/NA	Water	8260B	
400-182304-12	P93B-ROX-010820	Total/NA	Water	8260B	
400-182304-13	P93B-ROX-010820-DUP	Total/NA	Water	8260B	
400-182304-14	P56-ROX-010820	Total/NA	Water	8260B	
400-182304-15	P74-ROX-010820	Total/NA	Water	8260B	
MB 400-473735/4	Method Blank	Total/NA	Water	8260B	
LCS 400-473735/1002	Lab Control Sample	Total/NA	Water	8260B	
400-182304-3 MS	MW6A-ROX-010820	Total/NA	Water	8260B	
400-182304-3 MSD	MW6A-ROX-010820	Total/NA	Water	8260B	

Analysis Batch: 474055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-14 - RA	P56-ROX-010820	Total/NA	Water	8260B	
MB 400-474055/4	Method Blank	Total/NA	Water	8260B	
LCS 400-474055/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 473677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-3	MW6A-ROX-010820	Total/NA	Water	3520C	
400-182304-4 - RA	MW6B-ROX-010820	Total/NA	Water	3520C	
400-182304-4	MW6B-ROX-010820	Total/NA	Water	3520C	
400-182304-5	MW6C-ROX-010820	Total/NA	Water	3520C	
400-182304-6	MW6D-ROX-010820	Total/NA	Water	3520C	
400-182304-9	P93C-ROX-010820-EB	Total/NA	Water	3520C	
400-182304-10	P93C-ROX-010820	Total/NA	Water	3520C	
400-182304-11	P93D-ROX-010820	Total/NA	Water	3520C	
400-182304-11 - RA	P93D-ROX-010820	Total/NA	Water	3520C	
400-182304-12	P93B-ROX-010820	Total/NA	Water	3520C	
400-182304-12 - DL	P93B-ROX-010820	Total/NA	Water	3520C	
400-182304-13	P93B-ROX-010820-DUP	Total/NA	Water	3520C	
400-182304-13 - DL	P93B-ROX-010820-DUP	Total/NA	Water	3520C	
400-182304-14	P56-ROX-010820	Total/NA	Water	3520C	
400-182304-15	P74-ROX-010820	Total/NA	Water	3520C	
MB 400-473677/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-473677/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-473677/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-473677/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-473677/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-182304-3 MS	MW6A-ROX-010820	Total/NA	Water	3520C	
400-182304-3 MSD	MW6A-ROX-010820	Total/NA	Water	3520C	

GC/MS Semi VOA

Analysis Batch: 473927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-473677/2-A	Lab Control Sample	Total/NA	Water	8270D	473677
LCSD 400-473677/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	473677

Analysis Batch: 474099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-3	MW6A-ROX-010820	Total/NA	Water	8270D	473677
400-182304-4	MW6B-ROX-010820	Total/NA	Water	8270D	473677
400-182304-5	MW6C-ROX-010820	Total/NA	Water	8270D	473677
400-182304-6	MW6D-ROX-010820	Total/NA	Water	8270D	473677
400-182304-9	P93C-ROX-010820-EB	Total/NA	Water	8270D	473677
400-182304-10	P93C-ROX-010820	Total/NA	Water	8270D	473677
400-182304-11	P93D-ROX-010820	Total/NA	Water	8270D	473677
400-182304-12	P93B-ROX-010820	Total/NA	Water	8270D	473677
400-182304-13	P93B-ROX-010820-DUP	Total/NA	Water	8270D	473677
400-182304-14	P56-ROX-010820	Total/NA	Water	8270D	473677
400-182304-15	P74-ROX-010820	Total/NA	Water	8270D	473677
MB 400-473677/1-A	Method Blank	Total/NA	Water	8270D	473677
LCS 400-473677/4-A	Lab Control Sample	Total/NA	Water	8270D	473677
LCSD 400-473677/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	473677
400-182304-3 MS	MW6A-ROX-010820	Total/NA	Water	8270D	473677
400-182304-3 MSD	MW6A-ROX-010820	Total/NA	Water	8270D	473677

Analysis Batch: 474274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-3	MW6A-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-4	MW6B-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-5	MW6C-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-6	MW6D-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-9	P93C-ROX-010820-EB	Total/NA	Water	8270D LL	473677
400-182304-10	P93C-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-11	P93D-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-12	P93B-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-13	P93B-ROX-010820-DUP	Total/NA	Water	8270D LL	473677
400-182304-14	P56-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-15	P74-ROX-010820	Total/NA	Water	8270D LL	473677
MB 400-473677/1-A	Method Blank	Total/NA	Water	8270D LL	473677
LCS 400-473677/2-A	Lab Control Sample	Total/NA	Water	8270D LL	473677
LCSD 400-473677/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	473677
400-182304-3 MS	MW6A-ROX-010820	Total/NA	Water	8270D LL	473677
400-182304-3 MSD	MW6A-ROX-010820	Total/NA	Water	8270D LL	473677

Analysis Batch: 474338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-11 - RA	P93D-ROX-010820	Total/NA	Water	8270D	473677
400-182304-12 - DL	P93B-ROX-010820	Total/NA	Water	8270D	473677
400-182304-13 - DL	P93B-ROX-010820-DUP	Total/NA	Water	8270D	473677

Analysis Batch: 476857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-4 - RA	MW6B-ROX-010820	Total/NA	Water	8270D	473677

GC Semi VOA

Prep Batch: 473548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-2	TB-ROXX-010820-8011-A	Total/NA	Water	8011	
400-182304-3	MW6A-ROX-010820	Total/NA	Water	8011	
400-182304-4	MW6B-ROX-010820	Total/NA	Water	8011	
400-182304-5	MW6C-ROX-010820	Total/NA	Water	8011	
400-182304-6	MW6D-ROX-010820	Total/NA	Water	8011	
400-182304-8	TB-ROX-010820-8011-B	Total/NA	Water	8011	
400-182304-9	P93C-ROX-010820-EB	Total/NA	Water	8011	
400-182304-10	P93C-ROX-010820	Total/NA	Water	8011	
400-182304-11	P93D-ROX-010820	Total/NA	Water	8011	
400-182304-12	P93B-ROX-010820	Total/NA	Water	8011	
400-182304-13	P93B-ROX-010820-DUP	Total/NA	Water	8011	
400-182304-14	P56-ROX-010820	Total/NA	Water	8011	
400-182304-15	P74-ROX-010820	Total/NA	Water	8011	
MB 400-473548/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473548/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473548/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-182304-3 MS	MW6A-ROX-010820	Total/NA	Water	8011	
400-182304-3 MSD	MW6A-ROX-010820	Total/NA	Water	8011	

Analysis Batch: 473595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182304-2	TB-ROXX-010820-8011-A	Total/NA	Water	8011	473548
400-182304-3	MW6A-ROX-010820	Total/NA	Water	8011	473548
400-182304-4	MW6B-ROX-010820	Total/NA	Water	8011	473548
400-182304-5	MW6C-ROX-010820	Total/NA	Water	8011	473548
400-182304-6	MW6D-ROX-010820	Total/NA	Water	8011	473548
400-182304-8	TB-ROX-010820-8011-B	Total/NA	Water	8011	473548
400-182304-9	P93C-ROX-010820-EB	Total/NA	Water	8011	473548
400-182304-10	P93C-ROX-010820	Total/NA	Water	8011	473548
400-182304-11	P93D-ROX-010820	Total/NA	Water	8011	473548
400-182304-12	P93B-ROX-010820	Total/NA	Water	8011	473548
400-182304-13	P93B-ROX-010820-DUP	Total/NA	Water	8011	473548
400-182304-14	P56-ROX-010820	Total/NA	Water	8011	473548
400-182304-15	P74-ROX-010820	Total/NA	Water	8011	473548
MB 400-473548/1-A	Method Blank	Total/NA	Water	8011	473548
LCS 400-473548/2-A	Lab Control Sample	Total/NA	Water	8011	473548
LCSD 400-473548/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473548
400-182304-3 MS	MW6A-ROX-010820	Total/NA	Water	8011	473548
400-182304-3 MSD	MW6A-ROX-010820	Total/NA	Water	8011	473548

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

Lab Sample ID: MB 400-473735/4
Matrix: Water
Analysis Batch: 473735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/20 09:09	1
Acrolein	ND		20	10	ug/L			01/13/20 09:09	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/20 09:09	1
Benzene	ND		1.0	0.38	ug/L			01/13/20 09:09	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/20 09:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/13/20 09:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Bromoform	ND		5.0	0.71	ug/L			01/13/20 09:09	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/20 09:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/20 09:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/20 09:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/20 09:09	1
Chloroform	ND		1.0	0.60	ug/L			01/13/20 09:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/13/20 09:09	1
Chloromethane	ND		1.0	0.83	ug/L			01/13/20 09:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 09:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/20 09:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/20 09:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/20 09:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/20 09:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/20 09:09	1
2-Hexanone	ND		25	3.1	ug/L			01/13/20 09:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/20 09:09	1
Methylene bromide	ND		5.0	0.59	ug/L			01/13/20 09:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/20 09:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/20 09:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/13/20 09:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/13/20 09:09	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/20 09:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/20 09:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/20 09:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/20 09:09	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/20 09:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/20 09:09	1

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

Lab Sample ID: MB 400-473735/4
Matrix: Water
Analysis Batch: 473735

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/20 09:09	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/20 09:09	1
Styrene	ND		1.0	1.0	ug/L			01/13/20 09:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/20 09:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/13/20 09:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/13/20 09:09	1
Toluene	ND		1.0	0.41	ug/L			01/13/20 09:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/20 09:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/13/20 09:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/20 09:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/13/20 09:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/13/20 09:09	1
Trichloroethene	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/20 09:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/20 09:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/20 09:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/20 09:09	1
Vinyl acetate	ND		25	2.0	ug/L			01/13/20 09:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/20 09:09	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/20 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*01/13/20 09:09*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*01/13/20 09:09*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*01/13/20 09:09*	*1*

Lab Sample ID: LCS 400-473735/1002
Matrix: Water
Analysis Batch: 473735

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	231		ug/L		115	43 - 160
Acrolein	500	582		ug/L		116	38 - 160
Acrylonitrile	500	636		ug/L		127	64 - 142
Benzene	50.0	58.3		ug/L		117	70 - 130
Bromobenzene	50.0	60.0		ug/L		120	70 - 132
Bromochloromethane	50.0	57.7		ug/L		115	70 - 130
Bromodichloromethane	50.0	56.9		ug/L		114	67 - 133
Bromoform	50.0	51.9		ug/L		104	57 - 140
Bromomethane	50.0	83.1	*	ug/L		166	10 - 160
2-Butanone (MEK)	200	234		ug/L		117	61 - 145
Carbon disulfide	50.0	52.0		ug/L		104	61 - 137
Carbon tetrachloride	50.0	53.9		ug/L		108	61 - 137
Chlorobenzene	50.0	58.9		ug/L		118	70 - 130
Dibromochloromethane	50.0	48.7		ug/L		97	67 - 135
Chloroethane	50.0	71.8	*	ug/L		144	55 - 141

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

Lab Sample ID: LCS 400-473735/1002
Matrix: Water
Analysis Batch: 473735

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	72.0		ug/L		144	10 - 160
Chloroform	50.0	60.1		ug/L		120	69 - 130
1-Chlorohexane	50.0	61.9		ug/L		124	69 - 130
Chloromethane	50.0	68.3		ug/L		137	58 - 137
cis-1,2-Dichloroethene	50.0	63.0		ug/L		126	68 - 130
cis-1,3-Dichloropropene	50.0	56.5		ug/L		113	69 - 132
1,2-Dichlorobenzene	50.0	59.3		ug/L		119	67 - 130
1,3-Dichlorobenzene	50.0	61.3		ug/L		123	70 - 130
1,4-Dichlorobenzene	50.0	60.2		ug/L		120	70 - 130
Dichlorodifluoromethane	50.0	62.0		ug/L		124	41 - 146
1,1-Dichloroethane	50.0	62.6		ug/L		125	70 - 130
1,2-Dichloroethane	50.0	64.4		ug/L		129	69 - 130
1,1-Dichloroethene	50.0	60.0		ug/L		120	63 - 134
1,2-Dichloropropane	50.0	62.3		ug/L		125	70 - 130
1,3-Dichloropropane	50.0	54.0		ug/L		108	70 - 130
2,2-Dichloropropane	50.0	53.6		ug/L		107	52 - 135
1,1-Dichloropropene	50.0	57.8		ug/L		116	70 - 130
Ethylbenzene	50.0	56.9		ug/L		114	70 - 130
Ethyl methacrylate	50.0	51.0		ug/L		102	68 - 130
Hexachlorobutadiene	50.0	72.9	*	ug/L		146	53 - 140
2-Hexanone	200	218		ug/L		109	65 - 137
Isopropylbenzene	50.0	60.0		ug/L		120	70 - 130
Methylene bromide	50.0	59.1		ug/L		118	70 - 130
Methylene Chloride	50.0	60.5		ug/L		121	66 - 135
4-Methyl-2-pentanone (MIBK)	200	242		ug/L		121	69 - 138
Methyl tert-butyl ether	50.0	57.5		ug/L		115	66 - 130
m-Xylene & p-Xylene	50.0	56.9		ug/L		114	70 - 130
Naphthalene	50.0	55.7		ug/L		111	47 - 149
n-Butylbenzene	50.0	55.5		ug/L		111	67 - 130
N-Propylbenzene	50.0	56.5		ug/L		113	70 - 130
o-Chlorotoluene	50.0	54.0		ug/L		108	70 - 130
o-Xylene	50.0	57.4		ug/L		115	70 - 130
p-Chlorotoluene	50.0	57.0		ug/L		114	70 - 130
p-Isopropyltoluene	50.0	58.3		ug/L		117	65 - 130
sec-Butylbenzene	50.0	57.4		ug/L		115	66 - 130
Styrene	50.0	58.4		ug/L		117	70 - 130
tert-Butylbenzene	50.0	55.0		ug/L		110	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.3		ug/L		113	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.8		ug/L		112	70 - 131
Tetrachloroethene	50.0	57.6		ug/L		115	65 - 130
Toluene	50.0	54.0		ug/L		108	70 - 130
trans-1,2-Dichloroethene	50.0	58.9		ug/L		118	70 - 130
trans-1,3-Dichloropropene	50.0	49.5		ug/L		99	63 - 130
1,2,3-Trichlorobenzene	50.0	66.6		ug/L		133	60 - 138
1,2,4-Trichlorobenzene	50.0	65.8		ug/L		132	60 - 140
1,1,1-Trichloroethane	50.0	54.5		ug/L		109	68 - 130
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	70 - 130
Trichloroethene	50.0	64.2		ug/L		128	70 - 130
Trichlorofluoromethane	50.0	66.0		ug/L		132	65 - 138

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

Lab Sample ID: LCS 400-473735/1002
Matrix: Water
Analysis Batch: 473735

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	56.9		ug/L		114	70 - 130
1,2,4-Trimethylbenzene	50.0	57.8		ug/L		116	70 - 130
1,3,5-Trimethylbenzene	50.0	57.3		ug/L		115	69 - 130
Vinyl acetate	100	121		ug/L		121	26 - 160
Vinyl chloride	50.0	66.9		ug/L		134	59 - 136
Xylenes, Total	100	114		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*78 - 118*
Dibromofluoromethane	*97*		*81 - 121*
Toluene-d8 (Surr)	*88*		*80 - 120*

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 473735

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	207		ug/L		104	43 - 150
Acrolein	ND		500	554		ug/L		111	38 - 150
Acrylonitrile	ND		500	637		ug/L		127	62 - 149
Benzene	ND		50.0	60.8		ug/L		122	56 - 142
Bromobenzene	ND		50.0	61.9		ug/L		124	59 - 136
Bromochloromethane	ND		50.0	59.0		ug/L		118	64 - 140
Bromodichloromethane	ND		50.0	57.4		ug/L		115	59 - 143
Bromoform	ND		50.0	50.6		ug/L		101	50 - 140
Bromomethane	ND	F1 *	50.0	82.7	F1	ug/L		165	10 - 150
2-Butanone (MEK)	ND		200	214		ug/L		107	55 - 150
Carbon disulfide	ND		50.0	54.6		ug/L		109	48 - 150
Carbon tetrachloride	ND		50.0	56.5		ug/L		113	55 - 145
Chlorobenzene	ND		50.0	61.9		ug/L		124	64 - 130
Dibromochloromethane	ND		50.0	49.2		ug/L		98	56 - 143
Chloroethane	ND	*	50.0	70.4		ug/L		141	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	4.75	J	ug/L		10	10 - 150
Chloroform	ND		50.0	61.8		ug/L		124	60 - 141
1-Chlorohexane	ND		50.0	66.8		ug/L		134	56 - 136
Chloromethane	ND		50.0	68.0		ug/L		136	49 - 148
cis-1,2-Dichloroethene	ND		50.0	63.9		ug/L		128	59 - 143
cis-1,3-Dichloropropene	ND		50.0	57.7		ug/L		115	57 - 140
1,2-Dichlorobenzene	ND		50.0	61.8		ug/L		124	52 - 137
1,3-Dichlorobenzene	ND		50.0	62.7		ug/L		125	54 - 135
1,4-Dichlorobenzene	ND		50.0	61.1		ug/L		122	53 - 135
Dichlorodifluoromethane	ND		50.0	60.9		ug/L		122	16 - 150
1,1-Dichloroethane	ND		50.0	62.9		ug/L		126	61 - 144
1,2-Dichloroethane	ND		50.0	66.6		ug/L		133	60 - 141
1,1-Dichloroethene	ND		50.0	61.5		ug/L		123	54 - 147
1,2-Dichloropropane	ND		50.0	64.2		ug/L		128	66 - 137
1,3-Dichloropropane	ND		50.0	53.3		ug/L		107	66 - 133
2,2-Dichloropropane	ND		50.0	54.3		ug/L		109	42 - 144

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

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 473735

Client Sample ID: MW6A-ROX-010820
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	61.6		ug/L		123	65 - 136
Ethylbenzene	ND		50.0	59.1		ug/L		118	58 - 131
Ethyl methacrylate	ND		50.0	51.4		ug/L		103	64 - 130
Hexachlorobutadiene	ND	F1 *	50.0	75.6	F1	ug/L		151	31 - 149
2-Hexanone	ND		200	206		ug/L		103	65 - 140
Isopropylbenzene	ND		50.0	61.1		ug/L		122	56 - 133
Methylene bromide	ND		50.0	61.4		ug/L		123	63 - 138
Methylene Chloride	ND		50.0	62.3		ug/L		125	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	238		ug/L		119	63 - 146
Methyl tert-butyl ether	0.86	J	50.0	57.2		ug/L		113	59 - 137
m-Xylene & p-Xylene	ND		50.0	58.4		ug/L		117	57 - 130
Naphthalene	ND		50.0	56.0		ug/L		112	25 - 150
n-Butylbenzene	ND		50.0	57.5		ug/L		115	41 - 142
N-Propylbenzene	ND		50.0	58.3		ug/L		117	51 - 138
o-Chlorotoluene	ND		50.0	55.8		ug/L		112	53 - 134
o-Xylene	ND		50.0	58.4		ug/L		117	61 - 130
p-Chlorotoluene	ND		50.0	59.6		ug/L		119	54 - 133
p-Isopropyltoluene	ND		50.0	59.5		ug/L		119	48 - 139
sec-Butylbenzene	ND		50.0	58.8		ug/L		118	50 - 138
Styrene	ND		50.0	58.7		ug/L		117	58 - 131
tert-Butylbenzene	ND		50.0	57.5		ug/L		115	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	59.7		ug/L		119	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	57.9		ug/L		116	66 - 135
Tetrachloroethene	ND		50.0	57.1		ug/L		114	52 - 133
Toluene	ND		50.0	55.2		ug/L		110	65 - 130
trans-1,2-Dichloroethene	ND		50.0	59.8		ug/L		120	61 - 143
trans-1,3-Dichloropropene	ND		50.0	49.0		ug/L		98	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	67.6		ug/L		135	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	67.1		ug/L		134	39 - 148
1,1,1-Trichloroethane	ND		50.0	57.5		ug/L		115	57 - 142
1,1,2-Trichloroethane	ND		50.0	53.0		ug/L		106	66 - 131
Trichloroethene	ND		50.0	65.5		ug/L		131	64 - 136
Trichlorofluoromethane	ND		50.0	64.9		ug/L		130	54 - 150
1,2,3-Trichloropropane	ND		50.0	57.4		ug/L		115	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	61.0		ug/L		122	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	59.2		ug/L		118	52 - 135
Vinyl acetate	ND		100	115		ug/L		115	26 - 150
Vinyl chloride	ND		50.0	67.5		ug/L		135	46 - 150
Xylenes, Total	ND		100	117		ug/L		117	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*85*		*78 - 118*
Dibromofluoromethane	*94*		*81 - 121*
Toluene-d8 (Surr)	*88*		*80 - 120*

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

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 473735

Client Sample ID: MW6A-ROX-010820
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	14	30
Acrolein	ND		500	471		ug/L		94	38 - 150	16	31
Acrylonitrile	ND		500	549		ug/L		110	62 - 149	15	30
Benzene	ND		50.0	52.1		ug/L		104	56 - 142	15	30
Bromobenzene	ND		50.0	53.3		ug/L		107	59 - 136	15	30
Bromochloromethane	ND		50.0	49.7		ug/L		99	64 - 140	17	30
Bromodichloromethane	ND		50.0	48.9		ug/L		98	59 - 143	16	30
Bromoform	ND		50.0	47.4		ug/L		95	50 - 140	6	30
Bromomethane	ND	F1 *	50.0	68.9		ug/L		138	10 - 150	18	50
2-Butanone (MEK)	ND		200	187		ug/L		94	55 - 150	13	30
Carbon disulfide	ND		50.0	47.7		ug/L		95	48 - 150	13	30
Carbon tetrachloride	ND		50.0	48.5		ug/L		97	55 - 145	15	30
Chlorobenzene	ND		50.0	52.9		ug/L		106	64 - 130	16	30
Dibromochloromethane	ND		50.0	39.7		ug/L		79	56 - 143	21	30
Chloroethane	ND	*	50.0	59.7		ug/L		119	50 - 150	16	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	53.7		ug/L		107	60 - 141	14	30
1-Chlorohexane	ND		50.0	54.5		ug/L		109	56 - 136	20	30
Chloromethane	ND		50.0	58.0		ug/L		116	49 - 148	16	31
cis-1,2-Dichloroethene	ND		50.0	56.9		ug/L		114	59 - 143	12	30
cis-1,3-Dichloropropene	ND		50.0	48.2		ug/L		96	57 - 140	18	30
1,2-Dichlorobenzene	ND		50.0	52.1		ug/L		104	52 - 137	17	30
1,3-Dichlorobenzene	ND		50.0	54.0		ug/L		108	54 - 135	15	30
1,4-Dichlorobenzene	ND		50.0	53.2		ug/L		106	53 - 135	14	30
Dichlorodifluoromethane	ND		50.0	51.3		ug/L		103	16 - 150	17	31
1,1-Dichloroethane	ND		50.0	55.8		ug/L		112	61 - 144	12	30
1,2-Dichloroethane	ND		50.0	57.3		ug/L		115	60 - 141	15	30
1,1-Dichloroethene	ND		50.0	54.6		ug/L		109	54 - 147	12	30
1,2-Dichloropropane	ND		50.0	54.7		ug/L		109	66 - 137	16	30
1,3-Dichloropropane	ND		50.0	46.8		ug/L		94	66 - 133	13	30
2,2-Dichloropropane	ND		50.0	48.6		ug/L		97	42 - 144	11	31
1,1-Dichloropropene	ND		50.0	52.2		ug/L		104	65 - 136	17	30
Ethylbenzene	ND		50.0	50.9		ug/L		102	58 - 131	15	30
Ethyl methacrylate	ND		50.0	44.9		ug/L		90	64 - 130	14	30
Hexachlorobutadiene	ND	F1 *	50.0	64.8		ug/L		130	31 - 149	15	36
2-Hexanone	ND		200	180		ug/L		90	65 - 140	13	30
Isopropylbenzene	ND		50.0	53.5		ug/L		107	56 - 133	13	30
Methylene bromide	ND		50.0	51.1		ug/L		102	63 - 138	18	30
Methylene Chloride	ND		50.0	53.7		ug/L		107	60 - 146	15	32
4-Methyl-2-pentanone (MIBK)	ND		200	200		ug/L		100	63 - 146	18	30
Methyl tert-butyl ether	0.86	J	50.0	50.0		ug/L		98	59 - 137	13	30
m-Xylene & p-Xylene	ND		50.0	50.2		ug/L		100	57 - 130	15	30
Naphthalene	ND		50.0	48.8		ug/L		98	25 - 150	14	30
n-Butylbenzene	ND		50.0	50.0		ug/L		100	41 - 142	14	31
N-Propylbenzene	ND		50.0	51.1		ug/L		102	51 - 138	13	30
o-Chlorotoluene	ND		50.0	48.4		ug/L		97	53 - 134	14	30
o-Xylene	ND		50.0	50.6		ug/L		101	61 - 130	14	30
p-Chlorotoluene	ND		50.0	51.5		ug/L		103	54 - 133	15	30

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

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 473735

Client Sample ID: MW6A-ROX-010820
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	52.6		ug/L		105	48 - 139	12	30
sec-Butylbenzene	ND		50.0	51.7		ug/L		103	50 - 138	13	30
Styrene	ND		50.0	51.1		ug/L		102	58 - 131	14	30
tert-Butylbenzene	ND		50.0	50.6		ug/L		101	54 - 146	13	30
1,1,1,2-Tetrachloroethane	ND		50.0	50.6		ug/L		101	59 - 137	16	30
1,1,2,2-Tetrachloroethane	ND		50.0	49.4		ug/L		99	66 - 135	16	30
Tetrachloroethene	ND		50.0	50.0		ug/L		100	52 - 133	13	30
Toluene	ND		50.0	48.2		ug/L		96	65 - 130	13	30
trans-1,2-Dichloroethene	ND		50.0	53.6		ug/L		107	61 - 143	11	30
trans-1,3-Dichloropropene	ND		50.0	42.8		ug/L		86	53 - 133	13	30
1,2,3-Trichlorobenzene	ND		50.0	58.6		ug/L		117	43 - 145	14	30
1,2,4-Trichlorobenzene	ND		50.0	57.6		ug/L		115	39 - 148	15	30
1,1,1-Trichloroethane	ND		50.0	49.8		ug/L		100	57 - 142	14	30
1,1,2-Trichloroethane	ND		50.0	46.2		ug/L		92	66 - 131	14	30
Trichloroethene	ND		50.0	56.9		ug/L		114	64 - 136	14	30
Trichlorofluoromethane	ND		50.0	54.4		ug/L		109	54 - 150	18	30
1,2,3-Trichloropropane	ND		50.0	50.3		ug/L		101	65 - 133	13	30
1,2,4-Trimethylbenzene	ND		50.0	52.4		ug/L		105	50 - 139	15	30
1,3,5-Trimethylbenzene	ND		50.0	51.6		ug/L		103	52 - 135	14	30
Vinyl acetate	ND		100	97.4		ug/L		97	26 - 150	16	33
Vinyl chloride	ND		50.0	57.4		ug/L		115	46 - 150	16	30
Xylenes, Total	ND		100	101		ug/L		101	59 - 130	15	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*90*		*80 - 120*

Lab Sample ID: MB 400-474055/4
Matrix: Water
Analysis Batch: 474055

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.60	ug/L			01/15/20 13:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*01/15/20 13:31*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*01/15/20 13:31*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*01/15/20 13:31*	*1*

Lab Sample ID: LCS 400-474055/1002
Matrix: Water
Analysis Batch: 474055

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloroform			50.0	44.0		ug/L		88	69 - 130		

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

Lab Sample ID: LCS 400-474055/1002
Matrix: Water
Analysis Batch: 474055

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	111		78 - 118
Dibromofluoromethane	90		81 - 121
Toluene-d8 (Surr)	111		80 - 120

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
Benzenethiol	ND		10	1.7	ug/L		01/10/20 17:35	01/15/20 13:59	1
Benzoic acid	ND		30	7.3	ug/L		01/10/20 17:35	01/15/20 13:59	1
Benzyl alcohol	ND		10	2.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/10/20 17:35	01/15/20 13:59	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/10/20 17:35	01/15/20 13:59	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/10/20 17:35	01/15/20 13:59	1
Bis(2-ethylhexyl) phthalate	6.53	J	10	5.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/10/20 17:35	01/15/20 13:59	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Chloroaniline	ND		10	3.4	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Chlorophenol	ND		10	2.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Dibenzofuran	ND		10	0.52	ug/L		01/10/20 17:35	01/15/20 13:59	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Diethyl phthalate	ND		10	0.70	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/10/20 17:35	01/15/20 13:59	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/10/20 17:35	01/15/20 13:59	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/10/20 17:35	01/15/20 13:59	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/10/20 17:35	01/15/20 13:59	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/10/20 17:35	01/15/20 13:59	1
1,4-Dioxane	ND		10	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/10/20 17:35	01/15/20 13:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/10/20 17:35	01/15/20 13:59	1
Hexachloroethane	ND		10	4.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
Indene	ND		10	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
Isophorone	ND		10	0.57	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Methylphenol	ND		10	1.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/10/20 17:35	01/15/20 13:59	1

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
3-Nitroaniline	ND		10	1.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Nitroaniline	ND		10	2.5	ug/L		01/10/20 17:35	01/15/20 13:59	1
Nitrobenzene	ND		10	0.55	ug/L		01/10/20 17:35	01/15/20 13:59	1
2-Nitrophenol	ND		10	0.65	ug/L		01/10/20 17:35	01/15/20 13:59	1
4-Nitrophenol	ND		10	2.1	ug/L		01/10/20 17:35	01/15/20 13:59	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/10/20 17:35	01/15/20 13:59	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/10/20 17:35	01/15/20 13:59	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/10/20 17:35	01/15/20 13:59	1
Pentachlorophenol	ND		20	1.8	ug/L		01/10/20 17:35	01/15/20 13:59	1
Phenol	ND		10	2.6	ug/L		01/10/20 17:35	01/15/20 13:59	1
Pyridine	ND		10	3.2	ug/L		01/10/20 17:35	01/15/20 13:59	1
Quinoline	ND		10	6.0	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/10/20 17:35	01/15/20 13:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/10/20 17:35	01/15/20 13:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*34 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
2-Fluorophenol	*41*		*10 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
Phenol-d5	*62*		*10 - 120*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
Terphenyl-d14	*70*		*53 - 125*	*01/10/20 17:35*	*01/15/20 13:59*	*1*
2,4,6-Tribromophenol	*44*		*15 - 135*	*01/10/20 17:35*	*01/15/20 13:59*	*1*

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	21.9		ug/L		73	29 - 120
Benzoic acid	117	40.3		ug/L		35	10 - 150
Benzyl alcohol	30.0	25.2		ug/L		84	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.8		ug/L		79	45 - 120
Bis(2-chloroethyl)ether	30.0	24.8		ug/L		83	48 - 120
bis (2-chloroisopropyl) ether	30.0	24.2		ug/L		81	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	30.5	B	ug/L		102	48 - 150
4-Bromophenyl phenyl ether	30.0	23.7		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	28.8		ug/L		96	46 - 145
4-Chloroaniline	30.0	19.1		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	25.1		ug/L		84	39 - 140
2-Chloronaphthalene	30.0	24.2		ug/L		81	52 - 120
2-Chlorophenol	30.0	21.6		ug/L		72	34 - 120
4-Chlorophenyl phenyl ether	30.0	26.5		ug/L		88	58 - 124
Dibenz[a,h]acridine	30.0	23.1		ug/L		77	46 - 149
Dibenzofuran	30.0	26.8		ug/L		89	58 - 123
3,3'-Dichlorobenzidine	40.0	31.5		ug/L		79	39 - 135
2,4-Dichlorophenol	30.0	23.6		ug/L		79	39 - 128
Diethyl phthalate	30.0	28.8		ug/L		96	44 - 146

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

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	30.0	25.1		ug/L		84	44 - 120
Dimethyl phthalate	30.0	27.5		ug/L		92	50 - 131
Di-n-butyl phthalate	30.0	30.7		ug/L		102	55 - 131
4,6-Dinitro-ortho-cresol	60.0	18.6		ug/L		31	10 - 150
2,4-Dinitrophenol	60.0	13.1	J	ug/L		22	10 - 150
2,4-Dinitrotoluene	30.0	26.7		ug/L		89	58 - 140
2,6-Dinitrotoluene	30.0	26.8		ug/L		89	57 - 130
Di-n-octyl phthalate	30.0	28.4		ug/L		95	50 - 150
1,4-Dioxane	30.0	20.0		ug/L		67	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.9		ug/L		80	47 - 123
Hexachlorobenzene	30.0	26.0		ug/L		87	52 - 131
Hexachlorocyclopentadiene	30.0	8.69	J	ug/L		29	10 - 129
Hexachloroethane	30.0	12.3		ug/L		41	20 - 120
Indene	30.0	19.5		ug/L		65	47 - 120
Isophorone	30.0	24.6		ug/L		82	49 - 120
2-Methylphenol	30.0	24.0		ug/L		80	39 - 123
3 & 4 Methylphenol	30.0	25.0		ug/L		83	38 - 121
2-Nitroaniline	30.0	28.6		ug/L		95	47 - 150
3-Nitroaniline	30.0	26.3		ug/L		88	34 - 132
4-Nitroaniline	30.0	33.9		ug/L		113	41 - 135
Nitrobenzene	30.0	23.5		ug/L		78	47 - 120
2-Nitrophenol	30.0	22.2		ug/L		74	28 - 136
4-Nitrophenol	60.0	45.3		ug/L		75	10 - 150
N-Nitrosodimethylamine	30.0	23.7		ug/L		79	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.9		ug/L		83	44 - 120
N-Nitrosodiphenylamine	29.8	23.7		ug/L		80	56 - 120
Pentachlorophenol	60.0	25.6		ug/L		43	15 - 141
Phenol	30.0	22.5		ug/L		75	33 - 120
Pyridine	60.0	42.0		ug/L		70	26 - 120
Quinoline	30.0	26.1		ug/L		87	51 - 129
2,4,5-Trichlorophenol	30.0	26.4		ug/L		88	38 - 147
2,4,6-Trichlorophenol	30.0	25.9		ug/L		86	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*77*		*10 - 120*
Terphenyl-d14	*92*		*53 - 125*
2,4,6-Tribromophenol	*89*		*15 - 135*

Lab Sample ID: LCS 400-473677/4-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

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

Lab Sample ID: LCS 400-473677/4-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	57		34 - 120
2-Fluorophenol	35		10 - 120
Nitrobenzene-d5	75		27 - 120
Phenol-d5	62		10 - 120
Terphenyl-d14	79		53 - 125
2,4,6-Tribromophenol	27		15 - 135

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	23.9		ug/L		80	29 - 120	9	30
Benzoic acid	117	23.4	J *	ug/L		20	10 - 150	53	30
Benzyl alcohol	30.0	26.8		ug/L		89	19 - 125	6	30
Bis(2-chloroethoxy)methane	30.0	25.0		ug/L		83	45 - 120	5	30
Bis(2-chloroethyl)ether	30.0	26.1		ug/L		87	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	25.5		ug/L		85	30 - 125	5	30
Bis(2-ethylhexyl) phthalate	30.0	47.1	*	ug/L		157	48 - 150	43	30
4-Bromophenyl phenyl ether	30.0	25.6		ug/L		85	55 - 122	8	30
Butyl benzyl phthalate	30.0	31.5		ug/L		105	46 - 145	9	30
4-Chloroaniline	30.0	20.5		ug/L		68	30 - 120	7	30
4-Chloro-3-methylphenol	30.0	26.0		ug/L		87	39 - 140	3	30
2-Chloronaphthalene	30.0	26.2		ug/L		87	52 - 120	8	30
2-Chlorophenol	30.0	22.9		ug/L		76	34 - 120	6	30
4-Chlorophenyl phenyl ether	30.0	28.3		ug/L		94	58 - 124	7	30
Dibenz[a,h]acridine	30.0	25.2		ug/L		84	46 - 149	9	30
Dibenzofuran	30.0	28.6		ug/L		95	58 - 123	6	30
3,3'-Dichlorobenzidine	40.0	35.2		ug/L		88	39 - 135	11	30
2,4-Dichlorophenol	30.0	24.6		ug/L		82	39 - 128	4	30
Diethyl phthalate	30.0	31.1		ug/L		104	44 - 146	8	30
2,4-Dimethylphenol	30.0	26.0		ug/L		87	44 - 120	4	30
Dimethyl phthalate	30.0	29.6		ug/L		99	50 - 131	7	30
Di-n-butyl phthalate	30.0	32.5		ug/L		108	55 - 131	6	30
4,6-Dinitro-ortho-cresol	60.0	24.1		ug/L		40	10 - 150	26	30
2,4-Dinitrophenol	60.0	19.5	J *	ug/L		32	10 - 150	39	30
2,4-Dinitrotoluene	30.0	29.6		ug/L		99	58 - 140	10	30
2,6-Dinitrotoluene	30.0	29.6		ug/L		99	57 - 130	10	30
Di-n-octyl phthalate	30.0	30.7		ug/L		102	50 - 150	8	30
1,4-Dioxane	30.0	21.4		ug/L		71	25 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.5		ug/L		85	47 - 123	7	30
Hexachlorobenzene	30.0	28.1		ug/L		94	52 - 131	8	30
Hexachlorocyclopentadiene	30.0	9.60	J	ug/L		32	10 - 129	10	30
Hexachloroethane	30.0	14.5		ug/L		48	20 - 120	16	30
Indene	30.0	21.3		ug/L		71	47 - 120	9	30
Isophorone	30.0	25.8		ug/L		86	49 - 120	5	30
2-Methylphenol	30.0	24.9		ug/L		83	39 - 123	3	30
3 & 4 Methylphenol	30.0	26.4		ug/L		88	38 - 121	5	30

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

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 473927

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	30.0	31.1		ug/L		104	47 - 150	9	30
3-Nitroaniline	30.0	28.4		ug/L		95	34 - 132	8	30
4-Nitroaniline	30.0	36.0		ug/L		120	41 - 135	6	30
Nitrobenzene	30.0	24.8		ug/L		83	47 - 120	5	30
2-Nitrophenol	30.0	22.9		ug/L		76	28 - 136	3	30
4-Nitrophenol	60.0	43.4		ug/L		72	10 - 150	4	30
N-Nitrosodimethylamine	30.0	25.3		ug/L		84	22 - 148	7	30
N-Nitrosodi-n-propylamine	30.0	26.3		ug/L		88	44 - 120	5	30
N-Nitrosodiphenylamine	29.8	25.7		ug/L		86	56 - 120	8	30
Pentachlorophenol	60.0	30.8		ug/L		51	15 - 141	19	30
Phenol	30.0	24.0		ug/L		80	33 - 120	7	30
Pyridine	60.0	43.9		ug/L		73	26 - 120	4	30
Quinoline	30.0	27.4		ug/L		91	51 - 129	5	30
2,4,5-Trichlorophenol	30.0	27.7		ug/L		92	38 - 147	5	30
2,4,6-Trichlorophenol	30.0	27.5		ug/L		92	36 - 139	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*67*		*10 - 120*
Nitrobenzene-d5	*86*		*27 - 120*
Phenol-d5	*83*		*10 - 120*
Terphenyl-d14	*100*		*53 - 125*
2,4,6-Tribromophenol	*99*		*15 - 135*

Lab Sample ID: LCSD 400-473677/5-A
Matrix: Water
Analysis Batch: 474099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*57*		*10 - 120*
Nitrobenzene-d5	*72*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*47*		*15 - 135*

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 474099

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND	F1	29.0	10.2		ug/L		35	10 - 143
Benzoic acid	ND	* F1	113	111		ug/L		99	10 - 134
Benzyl alcohol	ND	F2	29.0	21.7		ug/L		75	10 - 154
Bis(2-chloroethoxy)methane	ND		29.0	17.0		ug/L		59	14 - 147

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

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 474099

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	ND	F2	29.0	20.2		ug/L		70	28 - 130
bis (2-chloroisopropyl) ether	ND		29.0	20.6		ug/L		71	10 - 141
Bis(2-ethylhexyl) phthalate	ND	* F2 F1	29.0	33.2		ug/L		115	43 - 160
4-Bromophenyl phenyl ether	ND		29.0	19.4		ug/L		67	26 - 159
Butyl benzyl phthalate	ND	F2 F1	29.0	22.0		ug/L		76	43 - 151
4-Chloroaniline	ND	F1	29.0	11.4		ug/L		39	10 - 152
4-Chloro-3-methylphenol	ND	F1	29.0	19.0		ug/L		66	17 - 156
2-Chloronaphthalene	ND		29.0	18.0		ug/L		62	10 - 155
2-Chlorophenol	ND	F1	29.0	18.4		ug/L		63	19 - 130
4-Chlorophenyl phenyl ether	ND		29.0	18.4		ug/L		63	25 - 161
Dibenz[a,h]acridine	ND		29.0	18.6		ug/L		64	42 - 147
Dibenzofuran	ND		29.0	18.3		ug/L		63	18 - 157
3,3'-Dichlorobenzidine	ND	F1	38.7	ND	F1	ug/L		0	10 - 172
2,4-Dichlorophenol	ND	F1	29.0	18.2		ug/L		63	16 - 147
Diethyl phthalate	ND	F2 F1	29.0	20.5		ug/L		71	23 - 160
2,4-Dimethylphenol	ND	F2	29.0	20.5		ug/L		71	25 - 146
Dimethyl phthalate	ND	F1	29.0	18.8		ug/L		65	11 - 158
Di-n-butyl phthalate	ND	F2 F1	29.0	23.0		ug/L		79	28 - 162
4,6-Dinitro-ortho-cresol	ND	F1	58.0	53.6		ug/L		92	10 - 168
2,4-Dinitrophenol	ND	* F1	58.0	61.3		ug/L		106	10 - 166
2,4-Dinitrotoluene	ND	F1	29.0	18.6		ug/L		64	26 - 158
2,6-Dinitrotoluene	ND	F1	29.0	18.9		ug/L		65	19 - 157
Di-n-octyl phthalate	ND	F2 F1	29.0	23.3		ug/L		81	42 - 150
1,4-Dioxane	ND		29.0	9.63	J	ug/L		33	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	29.0	22.1		ug/L		76	19 - 162
Hexachlorobenzene	ND	F2 F1	29.0	22.4		ug/L		77	45 - 145
Hexachlorocyclopentadiene	ND	F1	29.0	14.6	J	ug/L		50	10 - 151
Hexachloroethane	ND	F1	29.0	19.5		ug/L		67	29 - 130
Indene	ND	F2	29.0	15.3		ug/L		53	22 - 130
Isophorone	ND	F2	29.0	18.4		ug/L		63	24 - 144
2-Methylphenol	ND	F2 F1	29.0	20.6		ug/L		71	22 - 130
3 & 4 Methylphenol	ND	F2 F1	29.0	21.0		ug/L		72	31 - 130
2-Nitroaniline	ND	F1	29.0	22.8		ug/L		79	10 - 162
3-Nitroaniline	ND	F1	29.0	15.4		ug/L		53	10 - 163
4-Nitroaniline	ND	F1	29.0	25.8		ug/L		89	10 - 162
Nitrobenzene	ND	F2 F1	29.0	18.6		ug/L		64	34 - 135
2-Nitrophenol	ND	F1	29.0	19.9		ug/L		69	27 - 134
4-Nitrophenol	ND	F1	58.0	56.5		ug/L		97	10 - 175
N-Nitrosodimethylamine	ND	F1	29.0	21.9		ug/L		75	10 - 139
N-Nitrosodi-n-propylamine	ND	F1	29.0	21.8		ug/L		75	13 - 147
N-Nitrosodiphenylamine	ND	F2 F1	28.8	19.2		ug/L		67	31 - 150
Pentachlorophenol	ND	F2 F1	58.0	55.8		ug/L		96	10 - 180
Phenol	ND	F1	29.0	20.5		ug/L		71	23 - 130
Pyridine	ND		58.0	26.5		ug/L		46	10 - 130
Quinoline	ND		29.0	16.1		ug/L		55	10 - 180
2,4,5-Trichlorophenol	ND	F1	29.0	21.7		ug/L		75	43 - 137
2,4,6-Trichlorophenol	ND	F1	29.0	19.2		ug/L		66	42 - 135

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

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 474099

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	60		34 - 120
2-Fluorophenol	48		10 - 120
Nitrobenzene-d5	74		27 - 120
Phenol-d5	65		10 - 120
Terphenyl-d14	58		53 - 125
2,4,6-Tribromophenol	66		15 - 135

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 474099

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND	F1	28.8	ND	F1	ug/L		0	10 - 143	NC	63
Benzoic acid	ND	* F1	112	ND	F1	ug/L		0	10 - 134	NC	49
Benzyl alcohol	ND	F2	28.8	11.6	F2	ug/L		40	10 - 154	61	37
Bis(2-chloroethoxy)methane	ND		28.8	11.9		ug/L		41	14 - 147	36	70
Bis(2-chloroethyl)ether	ND	F2	28.8	12.5	F2	ug/L		44	28 - 130	47	42
bis (2-chloroisopropyl) ether	ND		28.8	17.7		ug/L		61	10 - 141	15	41
Bis(2-ethylhexyl) phthalate	ND	* F2 F1	28.8	4.81	J F2 F1	ug/L		17	43 - 160	149	35
4-Bromophenyl phenyl ether	ND		28.8	16.6		ug/L		58	26 - 159	15	30
Butyl benzyl phthalate	ND	F2 F1	28.8	1.88	J F2 F1	ug/L		7	43 - 151	169	32
4-Chloroaniline	ND	F1	28.8	ND	F1	ug/L		0	10 - 152	NC	94
4-Chloro-3-methylphenol	ND	F1	28.8	ND	F1	ug/L		0	17 - 156	NC	40
2-Chloronaphthalene	ND		28.8	15.8		ug/L		55	10 - 155	13	29
2-Chlorophenol	ND	F1	28.8	ND	F1	ug/L		0	19 - 130	NC	42
4-Chlorophenyl phenyl ether	ND		28.8	16.0		ug/L		56	25 - 161	14	27
Dibenz[a,h]acridine	ND		28.8	17.2		ug/L		60	42 - 147	8	40
Dibenzofuran	ND		28.8	16.2		ug/L		56	18 - 157	12	29
3,3'-Dichlorobenzidine	ND	F1	38.4	ND	F1	ug/L		0	10 - 172	NC	58
2,4-Dichlorophenol	ND	F1	28.8	ND	F1	ug/L		0	16 - 147	NC	43
Diethyl phthalate	ND	F2 F1	28.8	1.52	J F2 F1	ug/L		5	23 - 160	172	40
2,4-Dimethylphenol	ND	F2	28.8	10.9	F2	ug/L		38	25 - 146	61	47
Dimethyl phthalate	ND	F1	28.8	ND	F1	ug/L		0	11 - 158	NC	36
Di-n-butyl phthalate	ND	F2 F1	28.8	3.32	J F2 F1	ug/L		12	28 - 162	150	32
4,6-Dinitro-ortho-cresol	ND	F1	57.5	ND	F1	ug/L		0	10 - 168	NC	42
2,4-Dinitrophenol	ND	* F1	57.5	ND	F1	ug/L		0	10 - 166	NC	36
2,4-Dinitrotoluene	ND	F1	28.8	ND	F1	ug/L		0	26 - 158	NC	28
2,6-Dinitrotoluene	ND	F1	28.8	ND	F1	ug/L		0	19 - 157	NC	28
Di-n-octyl phthalate	ND	F2 F1	28.8	3.21	J F2 F1	ug/L		11	42 - 150	152	35
1,4-Dioxane	ND		28.8	7.92	J	ug/L		28	10 - 130	19	40
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	28.8	7.88	J F2	ug/L		27	19 - 162	95	40
Hexachlorobenzene	ND	F2 F1	28.8	11.4	F2 F1	ug/L		40	45 - 145	65	33
Hexachlorocyclopentadiene	ND	F1	28.8	ND	F1	ug/L		0	10 - 151	NC	50
Hexachloroethane	ND	F1	28.8	ND	F1	ug/L		0	29 - 130	NC	41
Indene	ND	F2	28.8	7.97	J F2	ug/L		28	22 - 130	63	40
Isophorone	ND	F2	28.8	34.3	F2	ug/L		119	24 - 144	60	33
2-Methylphenol	ND	F2 F1	28.8	3.97	J F2 F1	ug/L		14	22 - 130	135	47
3 & 4 Methylphenol	ND	F2 F1	28.8	3.29	J F2 F1	ug/L		11	31 - 130	146	47

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

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 474099

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	ND	F1	28.8	ND	F1	ug/L		0	10 - 162	NC	33
3-Nitroaniline	ND	F1	28.8	ND	F1	ug/L		0	10 - 163	NC	39
4-Nitroaniline	ND	F1	28.8	ND	F1	ug/L		0	10 - 162	NC	50
Nitrobenzene	ND	F2 F1	28.8	0.763	J F2 F1	ug/L		3	34 - 135	184	35
2-Nitrophenol	ND	F1	28.8	ND	F1	ug/L		0	27 - 134	NC	43
4-Nitrophenol	ND	F1	57.5	ND	F1	ug/L		0	10 - 175	NC	82
N-Nitrosodimethylamine	ND	F1	28.8	ND	F1	ug/L		0	10 - 139	NC	62
N-Nitrosodi-n-propylamine	ND	F1	28.8	ND	F1	ug/L		0	13 - 147	NC	36
N-Nitrosodiphenylamine	ND	F2 F1	28.5	5.42	J F2 F1	ug/L		19	31 - 150	112	34
Pentachlorophenol	ND	F2 F1	57.5	2.37	J F2 F1	ug/L		4	10 - 180	184	42
Phenol	ND	F1	28.8	ND	F1	ug/L		0	23 - 130	NC	52
Pyridine	ND		57.5	22.0		ug/L		38	10 - 130	19	55
Quinoline	ND		28.8	14.1		ug/L		49	10 - 180	13	40
2,4,5-Trichlorophenol	ND	F1	28.8	ND	F1	ug/L		0	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	*46*		*34 - 120*
2-Fluorophenol	*0.2*	*X*	*10 - 120*
Nitrobenzene-d5	*3*	*X*	*27 - 120*
Phenol-d5	*2*	*X*	*10 - 120*
Terphenyl-d14	*50*	*X*	*53 - 125*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Anthracene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Chrysene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Fluoranthene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Fluorene	ND		0.20	0.021	ug/L		01/10/20 17:35	01/16/20 13:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		01/10/20 17:35	01/16/20 13:25	1
Phenanthrene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
Pyrene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/10/20 17:35	01/16/20 13:25	1

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

Lab Sample ID: MB 400-473677/1-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473677

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	126		33 - 138	01/10/20 17:35	01/16/20 13:25	1
2-Fluorobiphenyl	86		15 - 122	01/10/20 17:35	01/16/20 13:25	1
Nitrobenzene-d5	99		19 - 130	01/10/20 17:35	01/16/20 13:25	1

Lab Sample ID: LCS 400-473677/2-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	26.5		ug/L		88	41 - 120
Acenaphthylene	30.0	23.6		ug/L		79	44 - 120
Anthracene	30.0	24.9		ug/L		83	49 - 120
Benzo[a]anthracene	30.0	26.7		ug/L		89	61 - 135
Benzo[a]pyrene	30.0	25.1		ug/L		84	52 - 120
Benzo[b]fluoranthene	30.0	30.6		ug/L		102	53 - 134
Benzo[g,h,i]perylene	30.0	18.9		ug/L		63	47 - 133
Benzo[k]fluoranthene	30.0	29.6		ug/L		99	57 - 134
Chrysene	30.0	25.9		ug/L		86	55 - 122
Dibenz(a,h)anthracene	30.0	23.0		ug/L		77	48 - 146
Fluoranthene	30.0	26.1		ug/L		87	54 - 128
Fluorene	30.0	29.3		ug/L		98	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	21.7		ug/L		72	43 - 142
Phenanthrene	30.0	25.5		ug/L		85	48 - 120
Pyrene	30.0	25.7		ug/L		86	48 - 132
1-Methylnaphthalene	30.0	20.7		ug/L		69	41 - 120
2-Methylnaphthalene	30.0	18.7		ug/L		62	32 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	103		33 - 138
2-Fluorobiphenyl	80		15 - 122
Nitrobenzene-d5	93		19 - 130

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	23.6		ug/L		79	41 - 120	12	56
Acenaphthylene	30.0	21.5		ug/L		72	44 - 120	9	56
Anthracene	30.0	23.6		ug/L		79	49 - 120	5	51
Benzo[a]anthracene	30.0	25.1		ug/L		84	61 - 135	6	49
Benzo[a]pyrene	30.0	23.9		ug/L		80	52 - 120	5	50
Benzo[b]fluoranthene	30.0	29.3		ug/L		98	53 - 134	4	54
Benzo[g,h,i]perylene	30.0	17.6		ug/L		59	47 - 133	7	50
Benzo[k]fluoranthene	30.0	27.6		ug/L		92	57 - 134	7	52
Chrysene	30.0	24.6		ug/L		82	55 - 122	5	50
Dibenz(a,h)anthracene	30.0	20.9		ug/L		70	48 - 146	10	50
Fluoranthene	30.0	24.4		ug/L		81	54 - 128	7	52

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

Lab Sample ID: LCSD 400-473677/3-A
Matrix: Water
Analysis Batch: 474274

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluorene	30.0	24.7		ug/L		82	45 - 125	17	56
Indeno[1,2,3-cd]pyrene	30.0	20.6		ug/L		69	43 - 142	5	51
Phenanthrene	30.0	23.8		ug/L		79	48 - 120	7	56
Pyrene	30.0	24.7		ug/L		82	48 - 132	4	52
1-Methylnaphthalene	30.0	21.3		ug/L		71	41 - 120	3	55
2-Methylnaphthalene	30.0	19.6		ug/L		65	32 - 124	4	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*97*		*33 - 138*
2-Fluorobiphenyl	*70*		*15 - 122*
Nitrobenzene-d5	*88*		*19 - 130*

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 474274

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		29.0	22.1		ug/L		76	35 - 113
Acenaphthylene	0.18	J	29.0	19.7		ug/L		67	41 - 118
Anthracene	ND		29.0	21.0		ug/L		72	45 - 122
Benzo[a]anthracene	ND		29.0	22.8		ug/L		78	55 - 133
Benzo[a]pyrene	ND		29.0	22.1		ug/L		76	50 - 108
Benzo[b]fluoranthene	ND		29.0	26.9		ug/L		93	50 - 128
Benzo[g,h,i]perylene	ND		29.0	18.3		ug/L		63	46 - 133
Benzo[k]fluoranthene	ND		29.0	26.8		ug/L		92	52 - 128
Chrysene	ND		29.0	21.9		ug/L		76	52 - 116
Dibenz(a,h)anthracene	ND		29.0	20.7		ug/L		71	52 - 143
Fluoranthene	ND		29.0	22.6		ug/L		78	32 - 150
Fluorene	ND		29.0	22.9		ug/L		79	15 - 150
Indeno[1,2,3-cd]pyrene	ND		29.0	20.3		ug/L		70	41 - 141
Phenanthrene	ND		29.0	21.5		ug/L		74	36 - 125
Pyrene	ND		29.0	22.1		ug/L		76	41 - 127
1-Methylnaphthalene	ND		29.0	20.9		ug/L		72	10 - 150
2-Methylnaphthalene	ND		29.0	19.3		ug/L		67	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*80*		*33 - 138*
2-Fluorobiphenyl	*69*		*15 - 122*
Nitrobenzene-d5	*84*		*19 - 130*

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 474274

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.8	19.2		ug/L		67	35 - 113	14	49
Acenaphthylene	0.18	J	28.8	15.9		ug/L		55	41 - 118	21	48
Anthracene	ND		28.8	18.9		ug/L		66	45 - 122	10	56

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

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 474274

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	ND		28.8	20.9		ug/L		73	55 - 133	9	57
Benzo[a]pyrene	ND		28.8	18.8		ug/L		65	50 - 108	16	59
Benzo[b]fluoranthene	ND		28.8	24.9		ug/L		87	50 - 128	8	62
Benzo[g,h,i]perylene	ND		28.8	15.7		ug/L		55	46 - 133	15	58
Benzo[k]fluoranthene	ND		28.8	22.4		ug/L		78	52 - 128	18	58
Chrysene	ND		28.8	21.4		ug/L		74	52 - 116	2	59
Dibenz(a,h)anthracene	ND		28.8	18.0		ug/L		63	52 - 143	14	60
Fluoranthene	ND		28.8	20.7		ug/L		72	32 - 150	9	59
Fluorene	ND		28.8	17.1		ug/L		59	15 - 150	29	49
Indeno[1,2,3-cd]pyrene	ND		28.8	17.2		ug/L		60	41 - 141	17	58
Phenanthrene	ND		28.8	19.5		ug/L		68	36 - 125	10	69
Pyrene	ND		28.8	19.7		ug/L		68	41 - 127	12	58
1-Methylnaphthalene	ND		28.8	16.7		ug/L		58	10 - 150	22	66
2-Methylnaphthalene	ND		28.8	17.3		ug/L		60	10 - 150	11	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*78*		*33 - 138*
2-Fluorobiphenyl	*61*		*15 - 122*
Nitrobenzene-d5	*3*	*X*	*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-473548/1-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473548

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		01/10/20 09:28	01/10/20 20:07	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/10/20 09:28	01/10/20 20:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*01/10/20 09:28*	*01/10/20 20:07*	*1*

Lab Sample ID: LCS 400-473548/2-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.134		ug/L		134	60 - 140
1,2-Dibromoethane	0.100	0.0859		ug/L		86	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*73*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-473548/3-A
Matrix: Water
Analysis Batch: 473595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473548

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.196	*	ug/L		196	60 - 140	39	30
1,2-Dibromoethane	0.100	0.117	*	ug/L		117	60 - 140	34	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*51 - 149*

Lab Sample ID: 400-182304-3 MS
Matrix: Water
Analysis Batch: 473595

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473548

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F1 *	0.106	0.163	F1	ug/L		154	65 - 135
1,2-Dibromoethane	ND	*	0.106	0.112		ug/L		105	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*51 - 149*

Lab Sample ID: 400-182304-3 MSD
Matrix: Water
Analysis Batch: 473595

Client Sample ID: MW6A-ROX-010820
Prep Type: Total/NA
Prep Batch: 473548

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 *	0.100	0.164	F1	ug/L		164	65 - 135	1	20
1,2-Dibromoethane	ND	*	0.100	0.109		ug/L		109	65 - 135	2	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:	PlaNet Site or Project ID
Bob Billman	25278
PO #	GSAP Project ID
60619901 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/8/20
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 - 1.03.001 / 60619901 - 1.03.0011
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
COC 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): James Ragatz, Beri Burleson
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
EMAIL To Contact: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

400-182304 COC

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ON WEEKEND ☐ RESULTS NEEDED

☐ 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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	REQUESTED ANALYSIS NON-UNIT COST 60619901 - 1.03.001: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0011: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-010820-8260-A	1/8/20	0000	Water	2					2	2				
	TB-ROX-010820-8011-A	1/8/20	0000	H2O	2					2			2		
	MW6A-ROX-010820	1/8/20	0855	H2O	4			2		6	2	1	2	1	
	MW6A-ROX-010820-MS	1/8/20	0855	H2O	4			2		6	2	1	2	1	
	MW6A-ROX-010820-MSD	1/8/20	0855	H2O	4			2		6	2	1	2	1	
	MW6B-ROX-010820	1/8/20	1005	H2O	4			2		6	2	1	2	1	
	MW6C-ROX-010820	1/8/20	1055	H2O	4			2		6	2	1	2	1	
	MW6D-ROX-010820	1/8/20	1215	H2O	4			2		6	2	1	2	1	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
James Ragatz	Fedex: 1275 8885 6635 1275 8885 6613 / 1275 8885 6624 1275 8885 6602	1/8/2020	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 1.9.20	Time: 9:36

Version: 14Dec15

Custody Seal #s: 1197536, 1197537, 1197538, 1197539, 1197540, 1197541, 1197542, 1197543

1.5°C, 0.2°C, 2.9°C, 1.6°C IR8

2/19/2020 (Rev. 2)

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 # 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 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/8/2020
PAGE: 2 of 2

SHIPPING COMPANY: AECOM
SHIPPER:
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 - 1.03.001 / 60619901 - 1.03.0011
LOD DELIVERABLE TO (Name, Company, City or 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): Brett Howell Mary D'Angelo
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ON WEEKEND ☐ RESULTS NEEDED

☐ IA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
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* Please provide sample receipt upon login

☑ 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 - 1.03.001: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0011: VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-010820-8260-B	1/8/20	0000	Water	X					2	X				
	TB-ROX-010820-8011-B		0000		X					2			X		
	P93C-ROX-010820-EB		0840		X			X		6	X	X	X	X	
	P93C-ROX-010820		0955		X			X		6	X	X	X	X	
	P93D-ROX-010820		1120		X			X		6	X	X	X	X	
	P93B-ROX-010820		1025		X			X		6	X	X	X	X	
	P93B-ROX-010820-DUP		1025		X			X		6	X	X	X	X	
	P56-ROX-010820		1215		X			X		6	X	X	X	X	
	P74-ROX-010820		1330		X			X		6	X	X	X	X	

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Mary D'Angelo	1275 8885 6615 1275 8885 6613 / Fedex: 1275 8885 6624 1275 8885 6602	1/8/2020	1600
	Brett Howell	1-9-20	9:36

Version: 14Dec15

Custody Seal #s: 1197536, 1197537, 1197538, 1197539, 1197540, 1197541, 1197542, 1197543
1.5°C, 0.2°C, 1.9°C, 1.6°C IR8

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182304-1

Login Number: 182304
List Number: 1
Creator: Conrady, Hank W

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	1.5°C 0.2°C 2.9°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: 400-182304-1
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	02-22-20
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	200041	10-09-19 *
Illinois	NELAP	004586	10-09-19 *
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	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182356-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 2/10/2020

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

Sample Identification	Sample Identification
TB-ROX-010920-8260-A	TB-ROX-010920-8011-A
MW16-ROX-010920	ROST3MW-ROX-010920
MW26-ROX-010920	MW1-ROX-010920
MW2-ROX-010920	TB-ROX-010920-8260-B
TB-ROX-010920-8260-B	P59-ROX-010920
P57-ROX-010920	T12-ROX-010920
T12-ROX-010920-Dup	P93A-ROX-010920
P93A-ROX-010920-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, laboratory case narrative indicated bis(2-ethylhexyl) phthalate was re-extracted outside of the extraction holding time criteria in several samples. bis(2-Ethylhexyl) phthalate was detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several surrogate recoveries were outside criteria in several investigative and QC samples. Several VOC, SVOC, and VOC by 8011 MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW16-ROX-010920. Several SVOC internal standard recoveries were outside criteria in sample MW1-ROX-010920-RE and quality control samples. The difference in acenaphthene results for the field duplicate pair T12-ROX-010920/T12-ROX-010920-Dup was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (J/UJ). Several samples were diluted to bring VOCs and 2-methylphenol into calibration range of the instrument. The initial calibration verification for dichlorodifluoromethane, and the continuing calibration verification for 4,6-dinitro-2-methylphenol (4,6-dinitro-ortho-cresol) were 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?

No, bis(2-ethylhexyl) phthalate was re-extracted 7 days outside of the extraction holding time criteria (7 days) in several samples due to results that were not consistent with the historical, and due to known laboratory contamination. Professional judgement was used to qualify as estimated (**UJ**); however, not reject the out of holding time data. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW1-ROX-010920-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
P59-ROX-010920-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
P57-ROX-010920-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
T12-ROX-010920-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
T12-ROX-010920-Dup-RE	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-474202/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	16.5 µg/L

Qualifications due to blank contamination are included in the table below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. bis(2-Ethylhexyl) phthalate data in samples MW1-ROX-010920, P59-ROX-010920, P57-ROX-010920, and field duplicate pair T12-ROX-010920/T12-ROX-010920-Dup is reported from the re-extracted run (RE) and is previously qualified in Section 3.0 of this review due to holding time criteria. bis(2-Ethylhexyl) phthalate was non-detect in the re-extracted runs (RE).

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
P93A-ROX-010920	SVOCs	bis(2-Ethylhexyl) phthalate	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-473981/1002	VOCs	2-Chloroethyl vinyl ether	**255**	NA	10-160
LCS/LCSD 400-474202/3-A/4-A	SVOCs	Benzenethiol	**4/3**	NA	10-120/30

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-475158/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	78/137	**55**	48-150/30
LCS/LCSD 400-473741/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	112/114	**41**	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
MW16-ROX-010920	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-010920	SVOCs	Benzenethiol	**UJ**
MW26-ROX-010920	SVOCs	Benzenethiol	**UJ**
MW1-ROX-010920	SVOCs	Benzenethiol	**UJ**
MW2-ROX-010920	SVOCs	Benzenethiol	**UJ**
P59-ROX-010920	SVOCs	Benzenethiol	**UJ**
P57-ROX-010920	SVOCs	Benzenethiol	**UJ**
T12-ROX-010920	SVOCs	Benzenethiol	**UJ**
T12-ROX-010920-Dup	SVOCs	Benzenethiol	**UJ**
P93A-ROX-010920	SVOCs	Benzenethiol	**UJ**
P93A-ROX-010920-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW1-ROX-010920-RE	SVOCs	2-Fluorobiphenyl	**136**	34-120
MW1-ROX-010920-RE	SVOCs	Terphenyl-d_{14}	**134**	53-125
P59-ROX-010920-RE	SVOCs	Terphenyl-d_{14}	**28**	53-125
P57-ROX-010920-RE	SVOCs	2-Fluorobiphenyl	**127**	34-120
P57-ROX-010920-RE	SVOCs	2,4,6-Tribromophenol	**168**	15-135
LCS 400-475158/2-A	SVOCs	Phenol-d_5	**2**	10-120
MW16-ROX-010920 MS	VOCs by 8011	4-Bromofluorobenzene	**210**	51-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral or acid SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Laboratory control samples and matrix spike samples are quality control samples and do not require qualification. Data associated with surrogate recoveries outside evaluation criteria in sample MW1-ROX-010920 were previously

qualified in Section 3.0 of this review due to holding time criteria. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW16-ROX-010920 was spiked and duplicated for Method 8260 VOCs, Method 8011 VOCs, and Method 8270 SVOCs/PAHs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW16-ROX-010920	VOCs	2-Chloroethyl vinyl ether	**0**/**0**	**NC**	10-150/50
MW16-ROX-010920	SVOCs	Benzoic acid	**0**/**0**	**NC**	10-134/49
MW16-ROX-010920	SVOCs	4-Chloro-3-methylphenol	68/45	**41**	17-156/40
MW16-ROX-010920	SVOCs	2-Chlorophenol	58/34	**51**	19-130/42
MW16-ROX-010920	SVOCs	2,4-Dichlorobenzidine	60/37	**46**	16-147/43
MW16-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	40/**0**	**NC**	10-168/42
MW16-ROX-010920	SVOCs	2,4-Dinitrophenol	21/**0**	**NC**	10-166/36
MW16-ROX-010920	SVOCs	Hexachlorocyclopentadiene	21/**0**	**NC**	10-151/50
MW16-ROX-010920	SVOCs	2-Nitrophenol	58/33	**56**	27-134/43
MW16-ROX-010920	SVOCs	4-Nitrophenol	49/**6**	**157**	10-175/82
MW16-ROX-010920	SVOCs	n-Nitrosodiphenylamine	**30**/49	**49**	31-150/34
MW16-ROX-010920	SVOCs	Pentachlorophenol	46/10	**130**	10-180/42
MW16-ROX-010920	VOCs by 8011	1,2-Dibromo-3-chloropropane	**139**/124	10	65-135/20
MW16-ROX-010920	VOCs by 8011	1,2-Dibromoethane	**136**/135	1	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
MW16-ROX-010920	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW16-ROX-010920	SVOCs	Benzoic acid	**UJ**
MW16-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW16-ROX-010920	SVOCs	2,4-Dinitrophenol	**UJ**
MW16-ROX-010920	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW16-ROX-010920	SVOCs	4-Nitrophenol	**UJ**
MW16-ROX-010920	SVOCs	n-Nitrosodiphenylamine	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
ICV 400-472769/11	SVOCs	Chrysene-d_{12}	**381274**	417202-1668806
CCV 400-474859/4	SVOCs	Perylene-d_{12}	**723961**	170261-681044
MW1-ROX-010920 RE	SVOCs	Chrysene-d_{12}	**355406**	359215-1436860

Initial and continuing calibration verifications are quality control samples and do not require qualification. Data associated with internal standard recoveries outside evaluation criteria in sample MW1-ROX-010920 were previously qualified in Section 3.0 of this review due to holding time 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
T12-ROX-010920	T12-ROX-010920-Dup
P93A-ROX-010920	P93A-ROX-010920-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
T12-ROX-010920	T12-ROX-010920-Dup	PAHs	Acenaphthene	**> 2X RL**	**J/UJ**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the initial calibration verification for dichlorodifluoromethane, and the continuing calibration verification for 4,6-dinitro-2-methylphenol (4,6-dinitro-ortho-cresol) were outside acceptance criteria, biased low, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
ROST3MW-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
ROST3MW-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW26-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
MW26-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW1-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
MW1-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW2-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
MW2-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P59-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
P59-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P57-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
P57-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
T12-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
T12-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
T12-ROX-010920-Dup	VOCs	Dichlorodifluoromethane	**UJ**
T12-ROX-010920-Dup	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P93A-ROX-010920	VOCs	Dichlorodifluoromethane	**UJ**
P93A-ROX-010920	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P93A-ROX-010920-Dup	VOCs	Dichlorodifluoromethane	**UJ**
P93A-ROX-010920-Dup	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-182356-1
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:
1/31/2020 5:46:06 PM

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(615)301-5038
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Reviewed 2/10/2020 MR

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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: 400-182356-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-182356-1

Comments
No additional comments.

Receipt
The samples were received on 1/10/2020 9:01 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, 0.9° C, 0.9° C, 3.0° C and 3.1° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-473981 recovered above the upper control limit for 2-Chloroethyl vinyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-473981 recovered outside control limits for the following analytes: 2-Chloroethyl vinyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-473981 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 400-473981 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-453153 was outside method criteria for the following analytes: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes are considered estimated.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW2-ROX-010920 (400-182356-7), P59-ROX-010920 (400-182356-10), P57-ROX-010920 (400-182356-11), T12-ROX-010920 (400-182356-12), T12-ROX-010920-DUP (400-182356-13), P93A-ROX-010920 (400-182356-14) and P93A-ROX-010920-DUP (400-182356-15). 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-010920-8260-A (400-182356-1), MW16-ROX-010920 (400-182356-3), ROST3MW-ROX-010920 (400-182356-4), MW26-ROX-010920 (400-182356-5), MW1-ROX-010920 (400-182356-6), MW2-ROX-010920 (400-182356-7), TB-ROX-010920-8260-B (400-182356-8), P59-ROX-010920 (400-182356-10), P57-ROX-010920 (400-182356-11), T12-ROX-010920 (400-182356-12), T12-ROX-010920-DUP (400-182356-13), P93A-ROX-010920 (400-182356-14) and P93A-ROX-010920-DUP (400-182356-15). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-474202 and analytical batch 400-474859 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-474202 and analytical batch 400-474859 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: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-474202

Job ID: 400-182356-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

and analytical batch 400-474859 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 continuing calibration verification (CCV) associated with batch 400-474859 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, Di-n-butyl phthalate and Butyl benzyl 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 400-474859 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-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: The method blank for preparation batch 400-474202 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). The samples associated with this method blank were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples were not performed. The following samples are impacted: MW16-ROX-010920 (400-182356-3), ROST3MW-ROX-010920 (400-182356-4), MW26-ROX-010920 (400-182356-5), MW2-ROX-010920 (400-182356-7), P93A-ROX-010920 (400-182356-14), P93A-ROX-010920-DUP (400-182356-15) and (MB 400-474202/1-A).

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: (CCVIS 400-474859/2). 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: (LCS 400-475158/2-A), P59-ROX-010920 (400-182356-10), P57-ROX-010920 (400-182356-11). 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 400-475158 and analytical batch 400-475930 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate.

Method 8270D: Bis(2-ethylhexyl) phthalate was detected above the reporting limit (RL) in the method blank associated with preparation batch 400-474202 and analytical batch 400-474859 as well as in the following samples: MW1-ROX-010920 (400-182356-6), P59-ROX-010920 (400-182356-10), P57-ROX-010920 (400-182356-11), T12-ROX-010920 (400-182356-12), T12-ROX-010920-DUP (400-182356-13) and (MB 400-474202/1-A). All affected samples were re-extracted and/or re-analyzed outside of holding time. Both sets of data have been reported.

Method 8270D: Surrogate recovery for the following sample was outside the upper control limit: MW1-ROX-010920 (400-182356-6). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The internal standard Chrysene-d12 response were outside of acceptance limits for the following sample: MW1-ROX-010920 (400-182356-6). Results for the affected analytes are possibly biased high, non-detect are qualified accordingly; therefore, the data have been reported.

Method 8270D: Internal standard (ISTD) response for Dibenz[a,h]acridine for the following sample was outside acceptance criteria: (CCV 400-474859/4). Only spiked QC is reported from this batch. The associated LCS, LCSD, MS, and MSD analytes are passing and all associated CCVs and samples have passing ISTD responses; therefore, the data has been reported.

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

GC Semi VOA

Method 8011: The matrix spike (MS) recoveries for preparation batch 400-473741 and analytical batch 400-473858 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8011: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-473741 and analytical batch 400-473858 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane.

Job ID: 400-182356-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8011: The continuing calibration verification (CCV) associated with batch 400-473858 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-473794 and analytical batch 400-473858 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 8011: Surrogate recovery in the matrix spike (MS) was outside the upper control limits: MW16-ROX-010920 (400-182356-3[MS]).

Method 8011: The continuing calibration verification (CCV) associated with batch 400-475080 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 400-475080 recovered above the upper control limit for 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: 400-182356-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182356-1	TB-ROX-010920-8260-A	Water	01/09/20 00:00	01/10/20 09:01	
400-182356-2	TB-ROX-010920-8011-A	Water	01/09/20 00:00	01/10/20 09:01	
400-182356-3	MW16-ROX-010920	Water	01/09/20 09:10	01/10/20 09:01	
400-182356-4	ROST3MW-ROX-010920	Water	01/09/20 10:15	01/10/20 09:01	
400-182356-5	MW26-ROX-010920	Water	01/09/20 11:10	01/10/20 09:01	
400-182356-6	MW1-ROX-010920	Water	01/09/20 12:00	01/10/20 09:01	
400-182356-7	MW2-ROX-010920	Water	01/09/20 13:10	01/10/20 09:01	
400-182356-8	TB-ROX-010920-8260-B	Water	01/09/20 00:00	01/10/20 09:01	
400-182356-9	TB-ROX-010920-8260-B	Water	01/09/20 00:00	01/10/20 09:01	
400-182356-10	P59-ROX-010920	Water	01/09/20 09:15	01/10/20 09:01	
400-182356-11	P57-ROX-010920	Water	01/09/20 10:15	01/10/20 09:01	
400-182356-12	T12-ROX-010920	Water	01/09/20 11:05	01/10/20 09:01	
400-182356-13	T12-ROX-010920-DUP	Water	01/09/20 11:05	01/10/20 09:01	
400-182356-14	P93A-ROX-010920	Water	01/09/20 11:55	01/10/20 09:01	
400-182356-15	P93A-ROX-010920-DUP	Water	01/09/20 11:55	01/10/20 09:01	

Detection Summary

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-A — Lab Sample ID: 400-182356-1

No Detections.

Client Sample ID: TB-ROX-010920-8011-A — Lab Sample ID: 400-182356-2

No Detections.

Client Sample ID: MW16-ROX-010920 — Lab Sample ID: 400-182356-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.036	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: ROST3MW-ROX-010920 — Lab Sample ID: 400-182356-4

No Detections.

Client Sample ID: MW26-ROX-010920 — Lab Sample ID: 400-182356-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.027	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW1-ROX-010920 — Lab Sample ID: 400-182356-6

*Do not use this data. Use re-extraction (RE) data.

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
* ~~Bis(2-ethylhexyl) phthalate~~	~~23~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~

Client Sample ID: MW2-ROX-010920 — Lab Sample ID: 400-182356-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	210		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene	34		2.0	1.1	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene	110		10	3.2	ug/L	2		8260B	Total/NA
Naphthalene	20		2.0	2.0	ug/L	2		8260B	Total/NA
N-Propylbenzene	49		2.0	1.4	ug/L	2		8260B	Total/NA
o-Xylene	13		10	1.2	ug/L	2		8260B	Total/NA
p-Isopropyltoluene	3.1		2.0	1.4	ug/L	2		8260B	Total/NA
sec-Butylbenzene	3.6		2.0	1.4	ug/L	2		8260B	Total/NA
Toluene	6.3		2.0	0.82	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene	33		2.0	1.6	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	32		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total	130		20	3.2	ug/L	2		8260B	Total/NA
1-Methylnaphthalene	9.2		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	13		0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: TB-ROX-010920-8260-B — Lab Sample ID: 400-182356-8

No Detections.

Client Sample ID: TB-ROX-010920-8260-B — Lab Sample ID: 400-182356-9

No Detections.

Client Sample ID: P59-ROX-010920 — Lab Sample ID: 400-182356-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1600		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	250		10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	29		10	5.3	ug/L	10		8260B	Total/NA
m-Xylene & p-Xylene	330		50	16	ug/L	10		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-182356-1

Client Sample ID: P59-ROX-010920 (Continued)

Lab Sample ID: 400-182356-10

*Do not use this data. Use re-extraction (RE) data.

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	140		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	48		10	6.9	ug/L	10		8260B	Total/NA
o-Xylene	55		50	6.0	ug/L	10		8260B	Total/NA
Toluene	280		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	190		10	8.2	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	55		10	5.6	ug/L	10		8260B	Total/NA
Xylenes, Total	390		100	16	ug/L	10		8260B	Total/NA
1-Methylnaphthalene	15		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	13		0.19	0.019	ug/L	1		8270D LL	Total/NA
~~Bis(2-ethylhexyl) phthalate~~	~~23~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Indene	1.5	J	9.6	0.96	ug/L	1		8270D	Total/NA
Phenol	11		9.6	2.5	ug/L	1		8270D	Total/NA
Pyridine	3.5	J	9.6	3.1	ug/L	1		8270D	Total/NA

Client Sample ID: P57-ROX-010920

Lab Sample ID: 400-182356-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1300		5.0	1.9	ug/L	5		8260B	Total/NA
Ethylbenzene	5.4		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	14		5.0	2.7	ug/L	5		8260B	Total/NA
Naphthalene	49		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	15		5.0	3.5	ug/L	5		8260B	Total/NA
tert-Butylbenzene	4.4	J	5.0	3.2	ug/L	5		8260B	Total/NA
Toluene	6.2		5.0	2.1	ug/L	5		8260B	Total/NA
Acenaphthene	0.26		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.40		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.34		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	28		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	33		0.19	0.019	ug/L	1		8270D LL	Total/NA
~~Bis(2-ethylhexyl) phthalate~~	~~11~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Dibenzofuran	0.62	J	9.6	0.50	ug/L	1		8270D	Total/NA
Phenol	33		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: T12-ROX-010920

Lab Sample ID: 400-182356-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1700		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	34		10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	5.4	J	10	5.3	ug/L	10		8260B	Total/NA
m-Xylene & p-Xylene	130		50	16	ug/L	10		8260B	Total/NA
Naphthalene	53		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	9.6	J	10	6.9	ug/L	10		8260B	Total/NA
Toluene	38		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	20		10	8.2	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	8.3	J	10	5.6	ug/L	10		8260B	Total/NA
Xylenes, Total	140		100	16	ug/L	10		8260B	Total/NA
Acenaphthene	0.44	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.80		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	28		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene - DL	39		0.96	0.096	ug/L	5		8270D LL	Total/NA
~~Bis(2-ethylhexyl) phthalate~~	~~11~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Indene	1.7	J	9.6	0.96	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-182356-1

Client Sample ID: T12-ROX-010920 (Continued)

Lab Sample ID: 400-182356-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	60		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: T12-ROX-010920-DUP

Lab Sample ID: 400-182356-13

* Do not use this data. Use re-extraction (RE) data.

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1800		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	37		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	150		50	16	ug/L	10		8260B	Total/NA
Naphthalene	57		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	9.7	J	10	6.9	ug/L	10		8260B	Total/NA
Toluene	43		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	23		10	8.2	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	8.7	J	10	5.6	ug/L	10		8260B	Total/NA
Xylenes, Total	160		100	16	ug/L	10		8260B	Total/NA
Fluorene	0.30		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.80		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	30		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene - DL	40		0.96	0.096	ug/L	5		8270D LL	Total/NA
X ~~Bis(2-ethylhexyl) phthalate~~	~~39~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Indene	1.9	J	9.6	0.96	ug/L	1		8270D	Total/NA
Phenol	71		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P93A-ROX-010920

Lab Sample ID: 400-182356-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	56000		500	190	ug/L	500		8260B	Total/NA
1-Methylnaphthalene	0.66		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.30		0.19	0.019	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	~~5.1~~	J B U	9.6	4.8	ug/L	1		8270D	Total/NA
Phenol	28		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P93A-ROX-010920-DUP

Lab Sample ID: 400-182356-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	57000		500	190	ug/L	500		8260B	Total/NA
1-Methylnaphthalene	0.76		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.16	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenol	23		9.6	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: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-A
Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/14/20 17:27	1
Acrolein	ND		20	10	ug/L			01/14/20 17:27	1
Acrylonitrile	ND		10	2.8	ug/L			01/14/20 17:27	1
Benzene	ND		1.0	0.38	ug/L			01/14/20 17:27	1
Bromobenzene	ND		1.0	0.54	ug/L			01/14/20 17:27	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/14/20 17:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Bromoform	ND		5.0	0.71	ug/L			01/14/20 17:27	1
Bromomethane	ND		1.0	0.98	ug/L			01/14/20 17:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/14/20 17:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Chloroethane	ND		1.0	0.76	ug/L			01/14/20 17:27	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			01/14/20 17:27	1
Chloroform	ND		1.0	0.60	ug/L			01/14/20 17:27	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/14/20 17:27	1
Chloromethane	ND		1.0	0.83	ug/L			01/14/20 17:27	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/14/20 17:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/14/20 17:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/14/20 17:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/14/20 17:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/14/20 17:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/14/20 17:27	1
2-Hexanone	ND		25	3.1	ug/L			01/14/20 17:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/14/20 17:27	1
Methylene bromide	ND		5.0	0.59	ug/L			01/14/20 17:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/14/20 17:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/14/20 17:27	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/14/20 17:27	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/14/20 17:27	1
Naphthalene	ND		1.0	1.0	ug/L			01/14/20 17:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/14/20 17:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/14/20 17:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/14/20 17:27	1
o-Xylene	ND		5.0	0.60	ug/L			01/14/20 17:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/14/20 17:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/14/20 17:27	1

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-A
Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/14/20 17:27	1
Styrene	ND		1.0	1.0	ug/L			01/14/20 17:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/14/20 17:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/14/20 17:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/14/20 17:27	1
Toluene	ND		1.0	0.41	ug/L			01/14/20 17:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/14/20 17:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/14/20 17:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/14/20 17:27	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/14/20 17:27	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/14/20 17:27	1
Trichloroethene	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/14/20 17:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/14/20 17:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/14/20 17:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/14/20 17:27	1
Vinyl acetate	ND		25	2.0	ug/L			01/14/20 17:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/14/20 17:27	1
Xylenes, Total	ND		10	1.6	ug/L			01/14/20 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*01/14/20 17:27*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/14/20 17:27*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/14/20 17:27*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8011-A
Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-2
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		01/22/20 12:08	01/22/20 23:51	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/22/20 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*01/22/20 12:08*	*01/22/20 23:51*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: MW16-ROX-010920
Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/14/20 15:34	1
Acrolein	ND		20	10	ug/L			01/14/20 15:34	1
Acrylonitrile	ND		10	2.8	ug/L			01/14/20 15:34	1
Benzene	ND		1.0	0.38	ug/L			01/14/20 15:34	1
Bromobenzene	ND		1.0	0.54	ug/L			01/14/20 15:34	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/14/20 15:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Bromoform	ND		5.0	0.71	ug/L			01/14/20 15:34	1
Bromomethane	ND		1.0	0.98	ug/L			01/14/20 15:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/14/20 15:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Chloroethane	ND		1.0	0.76	ug/L			01/14/20 15:34	1
2-Chloroethyl vinyl ether	ND	F1 * UJ	5.0	2.0	ug/L			01/14/20 15:34	1
Chloroform	ND		1.0	0.60	ug/L			01/14/20 15:34	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/14/20 15:34	1
Chloromethane	ND		1.0	0.83	ug/L			01/14/20 15:34	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/14/20 15:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/14/20 15:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/14/20 15:34	1
Dichlorodifluoromethane	ND	UJ	1.0	0.85	ug/L			01/14/20 15:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/14/20 15:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/14/20 15:34	1
2-Hexanone	ND		25	3.1	ug/L			01/14/20 15:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/14/20 15:34	1
Methylene bromide	ND		5.0	0.59	ug/L			01/14/20 15:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/14/20 15:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/14/20 15:34	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/14/20 15:34	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/14/20 15:34	1
Naphthalene	ND		1.0	1.0	ug/L			01/14/20 15:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/14/20 15:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/14/20 15:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/14/20 15:34	1
o-Xylene	ND		5.0	0.60	ug/L			01/14/20 15:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/14/20 15:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/14/20 15:34	1

Client Sample ID: MW16-ROX-010920
Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/14/20 15:34	1
Styrene	ND		1.0	1.0	ug/L			01/14/20 15:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/14/20 15:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/14/20 15:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/14/20 15:34	1
Toluene	ND		1.0	0.41	ug/L			01/14/20 15:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/14/20 15:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/14/20 15:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/14/20 15:34	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/14/20 15:34	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/14/20 15:34	1
Trichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/14/20 15:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/14/20 15:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/14/20 15:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/14/20 15:34	1
Vinyl acetate	ND		25	2.0	ug/L			01/14/20 15:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/14/20 15:34	1
Xylenes, Total	ND		10	1.6	ug/L			01/14/20 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*01/14/20 15:34*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*01/14/20 15:34*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/14/20 15:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/20/20 21:51	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 21:51	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1
2-Methylnaphthalene	0.036	J	0.19	0.019	ug/L		01/15/20 18:07	01/20/20 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*33 - 138*	*01/15/20 18:07*	*01/20/20 21:51*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*01/15/20 18:07*	*01/20/20 21:51*	*1*

Client Sample ID: MW16-ROX-010920

Lab Sample ID: 400-182356-3
Matrix: Water

Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

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	01/15/20 18:07	01/20/20 21:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 19:47	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 19:47	1
Benzoic acid	ND	UJ	29	7.0	ug/L		01/15/20 18:07	01/21/20 19:47	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 19:47	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 19:47	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 19:47	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 19:47	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/15/20 18:07	01/21/20 19:47	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 19:47	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 19:47	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 19:47	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 19:47	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 19:47	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 19:47	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 19:47	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 19:47	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 19:47	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 19:47	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/15/20 18:07	01/21/20 19:47	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 19:47	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,4-Dinitrophenol	ND	UJ	29	3.3	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 19:47	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 19:47	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 19:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 19:47	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 19:47	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/15/20 18:07	01/21/20 19:47	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 19:47	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 19:47	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 19:47	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 19:47	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 19:47	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 19:47	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 19:47	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 19:47	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 19:47	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 19:47	1
4-Nitrophenol	ND	UJ	9.6	2.0	ug/L		01/15/20 18:07	01/21/20 19:47	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 19:47	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 19:47	1

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

Job ID: 400-182356-1

Client Sample ID: MW16-ROX-010920
Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND	UJ	9.6	0.45	ug/L		01/15/20 18:07	01/21/20 19:47	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 19:47	1
Phenol	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 19:47	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 19:47	1
Quinoline	ND		9.6	5.7	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/21/20 19:47	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*34 - 120*	*01/15/20 18:07*	*01/21/20 19:47*	*1*
2-Fluorophenol	*60*		*10 - 120*	*01/15/20 18:07*	*01/21/20 19:47*	*1*
Nitrobenzene-d5	*77*		*27 - 120*	*01/15/20 18:07*	*01/21/20 19:47*	*1*
Phenol-d5	*69*		*10 - 120*	*01/15/20 18:07*	*01/21/20 19:47*	*1*
Terphenyl-d14	*93*		*53 - 125*	*01/15/20 18:07*	*01/21/20 19:47*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*01/15/20 18:07*	*01/21/20 19:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 13:07	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	F1 *	0.031	0.0057	ug/L		01/13/20 08:57	01/14/20 18:12	1
1,2-Dibromoethane	ND	F1	0.021	0.0052	ug/L		01/13/20 08:57	01/14/20 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 18:12*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: ROST3MW-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 14:29	1
Acrolein	ND		20	10	ug/L			01/16/20 14:29	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 14:29	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 14:29	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 14:29	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 14:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 14:29	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 14:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 14:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 14:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 14:29	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 14:29	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 14:29	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 14:29	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 14:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 14:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 14:29	1
Dichlorodifluoromethane	ND	UJ	1.0	0.85	ug/L			01/16/20 14:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 14:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 14:29	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 14:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 14:29	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 14:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 14:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 14:29	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 14:29	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 14:29	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 14:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 14:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 14:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 14:29	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 14:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 14:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 14:29	1

Client Sample ID: ROST3MW-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 14:29	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 14:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 14:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 14:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 14:29	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 14:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 14:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 14:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 14:29	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:29	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 14:29	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 14:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 14:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 14:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 14:29	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 14:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 14:29	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*01/16/20 14:29*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*01/16/20 14:29*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/16/20 14:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/20/20 22:46	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 22:46	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*105*		*33 - 138*	*01/15/20 18:07*	*01/20/20 22:46*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*01/15/20 18:07*	*01/20/20 22:46*	*1*

Client Sample ID: ROST3MW-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*74*		*19 - 130*	*01/15/20 18:07*	*01/20/20 22:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 20:51	1
Benzenethiol	ND	* u5	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 20:51	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 20:51	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 20:51	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 20:51	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 20:51	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/15/20 18:07	01/21/20 20:51	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/15/20 18:07	01/21/20 20:51	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 20:51	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 20:51	1
4-Chloroaniline	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 20:51	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 20:51	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 20:51	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 20:51	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 20:51	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 20:51	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 20:51	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 20:51	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/15/20 18:07	01/21/20 20:51	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 20:51	1
4,6-Dinitro-ortho-cresol	ND	u5	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 20:51	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 20:51	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 20:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 20:51	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 20:51	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 20:51	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 20:51	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 20:51	1
Isophorone	ND		9.6	0.54	ug/L		01/15/20 18:07	01/21/20 20:51	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 20:51	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/15/20 18:07	01/21/20 20:51	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 20:51	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 20:51	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 20:51	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 20:51	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 20:51	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 20:51	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 20:51	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 20:51	1

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

Job ID: 400-182356-1

Client Sample ID: ROST3MW-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 20:51	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 20:51	1
Phenol	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 20:51	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 20:51	1
Quinoline	ND		9.6	5.7	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/21/20 20:51	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*01/15/20 18:07*	*01/21/20 20:51*	*1*
2-Fluorophenol	*67*		*10 - 120*	*01/15/20 18:07*	*01/21/20 20:51*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*01/15/20 18:07*	*01/21/20 20:51*	*1*
Phenol-d5	*72*		*10 - 120*	*01/15/20 18:07*	*01/21/20 20:51*	*1*
Terphenyl-d14	*90*		*53 - 125*	*01/15/20 18:07*	*01/21/20 20:51*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*01/15/20 18:07*	*01/21/20 20:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/23/20 15:15	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		01/22/20 12:08	01/23/20 00:11	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/23/20 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/22/20 12:08*	*01/23/20 00:11*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: MW26-ROX-010920
Date Collected: 01/09/20 11:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 14:57	1
Acrolein	ND		20	10	ug/L			01/16/20 14:57	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 14:57	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 14:57	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 14:57	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 14:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 14:57	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 14:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 14:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 14:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 14:57	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 14:57	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 14:57	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 14:57	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 14:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 14:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 14:57	1
Dichlorodifluoromethane	ND	u5	1.0	0.85	ug/L			01/16/20 14:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 14:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 14:57	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 14:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 14:57	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 14:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 14:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 14:57	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 14:57	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 14:57	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 14:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 14:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 14:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 14:57	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 14:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 14:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 14:57	1

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

Job ID: 400-182356-1

Client Sample ID: MW26-ROX-010920
Date Collected: 01/09/20 11:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 14:57	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 14:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 14:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 14:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 14:57	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 14:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 14:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 14:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 14:57	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:57	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 14:57	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 14:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 14:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 14:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 14:57	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 14:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 14:57	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*01/16/20 14:57*	*1*
Dibromofluoromethane	*87*		*81 - 121*		*01/16/20 14:57*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/16/20 14:57*	*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		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/20/20 23:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:04	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1
2-Methylnaphthalene	0.027	J	0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*33 - 138*	*01/15/20 18:07*	*01/20/20 23:04*	*1*
2-Fluorobiphenyl	*61*		*15 - 122*	*01/15/20 18:07*	*01/20/20 23:04*	*1*

Client Sample ID: MW26-ROX-010920
Date Collected: 01/09/20 11:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*58*		*19 - 130*	*01/15/20 18:07*	*01/20/20 23:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 21:12	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 21:12	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 21:12	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:12	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 21:12	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 21:12	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 21:12	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/15/20 18:07	01/21/20 21:12	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 21:12	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 21:12	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 21:12	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 21:12	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 21:12	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 21:12	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:12	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 21:12	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 21:12	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:12	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/15/20 18:07	01/21/20 21:12	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 21:12	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 21:12	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 21:12	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:12	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 21:12	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 21:12	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 21:12	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:12	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 21:12	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 21:12	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 21:12	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 21:12	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 21:12	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 21:12	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 21:12	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 21:12	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 21:12	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:12	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 21:12	1

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

Job ID: 400-182356-1

Client Sample ID: MW26-ROX-010920
Date Collected: 01/09/20 11:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 21:12	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 21:12	1
Phenol	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 21:12	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 21:12	1
Quinoline	ND		9.6	5.8	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 21:12	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*34 - 120*	*01/15/20 18:07*	*01/21/20 21:12*	*1*
2-Fluorophenol	*24*		*10 - 120*	*01/15/20 18:07*	*01/21/20 21:12*	*1*
Nitrobenzene-d5	*60*		*27 - 120*	*01/15/20 18:07*	*01/21/20 21:12*	*1*
Phenol-d5	*33*		*10 - 120*	*01/15/20 18:07*	*01/21/20 21:12*	*1*
Terphenyl-d14	*99*		*53 - 125*	*01/15/20 18:07*	*01/21/20 21:12*	*1*
2,4,6-Tribromophenol	*43*		*15 - 135*	*01/15/20 18:07*	*01/21/20 21:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 13:50	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		01/22/20 12:08	01/23/20 00:30	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		01/22/20 12:08	01/23/20 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/22/20 12:08*	*01/23/20 00:30*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: MW1-ROX-010920
Date Collected: 01/09/20 12:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 15:26	1
Acrolein	ND		20	10	ug/L			01/16/20 15:26	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 15:26	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 15:26	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 15:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 15:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 15:26	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 15:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 15:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 15:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 15:26	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 15:26	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 15:26	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 15:26	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 15:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 15:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 15:26	1
Dichlorodifluoromethane	ND	W5	1.0	0.85	ug/L			01/16/20 15:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 15:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 15:26	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 15:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 15:26	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 15:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 15:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 15:26	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 15:26	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 15:26	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 15:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 15:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 15:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 15:26	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 15:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 15:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 15:26	1

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

Job ID: 400-182356-1

Client Sample ID: MW1-ROX-010920
Date Collected: 01/09/20 12:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 15:26	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 15:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 15:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 15:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 15:26	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 15:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 15:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 15:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 15:26	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 15:26	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 15:26	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 15:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 15:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 15:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 15:26	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 15:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 15:26	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*01/16/20 15:26*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*01/16/20 15:26*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/16/20 15:26*	*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		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Chrysene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/20/20 23:23	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:23	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*33 - 138*	*01/15/20 18:07*	*01/20/20 23:23*	*1*
2-Fluorobiphenyl	*52*		*15 - 122*	*01/15/20 18:07*	*01/20/20 23:23*	*1*

Client Sample ID: MW1-ROX-010920
Date Collected: 01/09/20 12:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	54		19 - 130	01/15/20 18:07	01/20/20 23:23	1

*Do not use this data. Use re-extraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 21:33	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 21:33	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 21:33	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:33	1
Bis(2-chloroethoxy)methane	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 21:33	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 21:33	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 21:33	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~23~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/21/20 21:33~~	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 21:33	1
Butyl benzyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 21:33	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 21:33	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 21:33	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 21:33	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 21:33	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:33	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 21:33	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 21:33	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:33	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/15/20 18:07	01/21/20 21:33	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 21:33	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 21:33	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 21:33	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:33	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 21:33	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 21:33	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 21:33	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:33	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 21:33	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 21:33	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 21:33	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 21:33	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 21:33	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 21:33	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 21:33	1
2-Nitrophenol	ND		9.6	0.63	ug/L		01/15/20 18:07	01/21/20 21:33	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 21:33	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:33	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 21:33	1

Client Sample ID: MW1-ROX-010920
Date Collected: 01/09/20 12:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 21:33	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 21:33	1
Phenol	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 21:33	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 21:33	1
Quinoline	ND		9.6	5.8	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 21:33	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*01/15/20 18:07*	*01/21/20 21:33*	*1*
2-Fluorophenol	*18*		*10 - 120*	*01/15/20 18:07*	*01/21/20 21:33*	*1*
Nitrobenzene-d5	*54*		*27 - 120*	*01/15/20 18:07*	*01/21/20 21:33*	*1*
Phenol-d5	*27*		*10 - 120*	*01/15/20 18:07*	*01/21/20 21:33*	*1*
Terphenyl-d14	*77*		*53 - 125*	*01/15/20 18:07*	*01/21/20 21:33*	*1*
2,4,6-Tribromophenol	*29*		*15 - 135*	*01/15/20 18:07*	*01/21/20 21:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H * U5	9.6	4.8	ug/L		01/23/20 10:36	01/30/20 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*136*	*X*	*34 - 120*	*01/23/20 10:36*	*01/30/20 17:10*	*1*
2-Fluorophenol	*27*		*10 - 120*	*01/23/20 10:36*	*01/30/20 17:10*	*1*
Nitrobenzene-d5	*116*		*27 - 120*	*01/23/20 10:36*	*01/30/20 17:10*	*1*
Phenol-d5	*50*		*10 - 120*	*01/23/20 10:36*	*01/30/20 17:10*	*1*
Terphenyl-d14	*134*	*X*	*53 - 125*	*01/23/20 10:36*	*01/30/20 17:10*	*1*
2,4,6-Tribromophenol	*79*		*15 - 135*	*01/23/20 10:36*	*01/30/20 17:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		01/22/20 12:08	01/23/20 00:50	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/23/20 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*01/22/20 12:08*	*01/23/20 00:50*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: MW2-ROX-010920
Date Collected: 01/09/20 13:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50	20	ug/L			01/16/20 15:55	2
Acrolein	ND		40	20	ug/L			01/16/20 15:55	2
Acrylonitrile	ND		20	5.6	ug/L			01/16/20 15:55	2
Benzene	ND		2.0	0.76	ug/L			01/16/20 15:55	2
Bromobenzene	ND		2.0	1.1	ug/L			01/16/20 15:55	2
Bromochloromethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Bromodichloromethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Bromoform	ND		10	1.4	ug/L			01/16/20 15:55	2
Bromomethane	ND		2.0	2.0	ug/L			01/16/20 15:55	2
2-Butanone (MEK)	ND		50	5.2	ug/L			01/16/20 15:55	2
Carbon disulfide	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Carbon tetrachloride	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Chlorobenzene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Dibromochloromethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Chloroethane	ND		2.0	1.5	ug/L			01/16/20 15:55	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			01/16/20 15:55	2
Chloroform	ND		2.0	1.2	ug/L			01/16/20 15:55	2
1-Chlorohexane	ND		2.0	1.4	ug/L			01/16/20 15:55	2
Chloromethane	ND		2.0	1.7	ug/L			01/16/20 15:55	2
cis-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			01/16/20 15:55	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			01/16/20 15:55	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			01/16/20 15:55	2
Dichlorodifluoromethane	ND	UJ	2.0	1.7	ug/L			01/16/20 15:55	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,2-Dichloroethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Ethylbenzene	210		2.0	1.0	ug/L			01/16/20 15:55	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			01/16/20 15:55	2
Hexachlorobutadiene	ND		10	1.8	ug/L			01/16/20 15:55	2
2-Hexanone	ND		50	6.2	ug/L			01/16/20 15:55	2
Isopropylbenzene	34		2.0	1.1	ug/L			01/16/20 15:55	2
Methylene bromide	ND		10	1.2	ug/L			01/16/20 15:55	2
Methylene Chloride	ND		10	6.0	ug/L			01/16/20 15:55	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			01/16/20 15:55	2
Methyl tert-butyl ether	ND		2.0	1.5	ug/L			01/16/20 15:55	2
m-Xylene & p-Xylene	110		10	3.2	ug/L			01/16/20 15:55	2
Naphthalene	20		2.0	2.0	ug/L			01/16/20 15:55	2
n-Butylbenzene	ND		2.0	1.5	ug/L			01/16/20 15:55	2
N-Propylbenzene	49		2.0	1.4	ug/L			01/16/20 15:55	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			01/16/20 15:55	2
o-Xylene	13		10	1.2	ug/L			01/16/20 15:55	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			01/16/20 15:55	2
p-Isopropyltoluene	3.1		2.0	1.4	ug/L			01/16/20 15:55	2

Client Sample ID: MW2-ROX-010920
Date Collected: 01/09/20 13:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	3.6		2.0	1.4	ug/L			01/16/20 15:55	2
Styrene	ND		2.0	2.0	ug/L			01/16/20 15:55	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			01/16/20 15:55	2
1,1,1,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Tetrachloroethene	ND		2.0	1.2	ug/L			01/16/20 15:55	2
Toluene	6.3		2.0	0.82	ug/L			01/16/20 15:55	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
trans-1,3-Dichloropropene	ND		10	1.0	ug/L			01/16/20 15:55	2
1,2,3-Trichlorobenzene	ND		2.0	1.4	ug/L			01/16/20 15:55	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			01/16/20 15:55	2
1,1,1-Trichloroethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,1,2-Trichloroethane	ND		10	1.0	ug/L			01/16/20 15:55	2
Trichloroethene	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			01/16/20 15:55	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			01/16/20 15:55	2
1,2,4-Trimethylbenzene	33		2.0	1.6	ug/L			01/16/20 15:55	2
1,3,5-Trimethylbenzene	32		2.0	1.1	ug/L			01/16/20 15:55	2
Vinyl acetate	ND		50	4.0	ug/L			01/16/20 15:55	2
Vinyl chloride	ND		2.0	1.0	ug/L			01/16/20 15:55	2
Xylenes, Total	130		20	3.2	ug/L			01/16/20 15:55	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*01/16/20 15:55*	*2*
Dibromofluoromethane	*90*		*81 - 121*		*01/16/20 15:55*	*2*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/16/20 15:55*	*2*

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	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Chrysene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/20/20 23:41	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/20/20 23:41	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
1-Methylnaphthalene	9.2		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1
2-Methylnaphthalene	13		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 138*	*01/15/20 18:07*	*01/20/20 23:41*	*1*
2-Fluorobiphenyl	*61*		*15 - 122*	*01/15/20 18:07*	*01/20/20 23:41*	*1*

Client Sample ID: MW2-ROX-010920
Date Collected: 01/09/20 13:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67		19 - 130	01/15/20 18:07	01/20/20 23:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 21:55	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 21:55	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 21:55	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:55	1
Bis(2-chloroethoxy)methane	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 21:55	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 21:55	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 21:55	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/15/20 18:07	01/21/20 21:55	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 21:55	1
Butyl benzyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 21:55	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 21:55	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 21:55	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 21:55	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 21:55	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:55	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 21:55	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 21:55	1
Diethyl phthalate	ND		9.6	0.68	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:55	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/15/20 18:07	01/21/20 21:55	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 21:55	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 21:55	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 21:55	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:55	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 21:55	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 21:55	1
Hexachloroethane	ND		9.6	4.1	ug/L		01/15/20 18:07	01/21/20 21:55	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 21:55	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 21:55	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 21:55	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 21:55	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 21:55	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 21:55	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 21:55	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 21:55	1
2-Nitrophenol	ND		9.6	0.63	ug/L		01/15/20 18:07	01/21/20 21:55	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 21:55	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:55	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 21:55	1

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

Job ID: 400-182356-1

Client Sample ID: MW2-ROX-010920
Date Collected: 01/09/20 13:10
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 21:55	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 21:55	1
Phenol	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 21:55	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 21:55	1
Quinoline	ND		9.6	5.8	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 21:55	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 120*	*01/15/20 18:07*	*01/21/20 21:55*	*1*
2-Fluorophenol	*49*		*10 - 120*	*01/15/20 18:07*	*01/21/20 21:55*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*01/15/20 18:07*	*01/21/20 21:55*	*1*
Phenol-d5	*59*		*10 - 120*	*01/15/20 18:07*	*01/21/20 21:55*	*1*
Terphenyl-d14	*95*		*53 - 125*	*01/15/20 18:07*	*01/21/20 21:55*	*1*
2,4,6-Tribromophenol	*86*		*15 - 135*	*01/15/20 18:07*	*01/21/20 21:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 14:32	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		01/22/20 12:08	01/23/20 01:10	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/23/20 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*66*		*51 - 149*	*01/22/20 12:08*	*01/23/20 01:10*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-B
Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 13:04	1
Acrolein	ND		20	10	ug/L			01/16/20 13:04	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 13:04	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 13:04	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 13:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 13:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 13:04	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 13:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 13:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 13:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 13:04	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 13:04	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 13:04	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 13:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 13:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 13:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 13:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 13:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 13:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 13:04	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 13:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 13:04	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 13:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 13:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 13:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 13:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 13:04	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 13:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 13:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 13:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 13:04	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 13:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 13:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 13:04	1

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-B
Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 13:04	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 13:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 13:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 13:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 13:04	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 13:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 13:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 13:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 13:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 13:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 13:04	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 13:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 13:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 13:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 13:04	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 13:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 13:04	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*01/16/20 13:04*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*01/16/20 13:04*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/16/20 13:04*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-B
Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-9
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		01/22/20 12:08	01/23/20 01:30	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/23/20 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/22/20 12:08*	*01/23/20 01:30*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: P59-ROX-010920
Date Collected: 01/09/20 09:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-10
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			01/16/20 16:51	10
Acrolein	ND		200	100	ug/L			01/16/20 16:51	10
Acrylonitrile	ND		100	28	ug/L			01/16/20 16:51	10
Benzene	1600		10	3.8	ug/L			01/16/20 16:51	10
Bromobenzene	ND		10	5.4	ug/L			01/16/20 16:51	10
Bromochloromethane	ND		10	5.2	ug/L			01/16/20 16:51	10
Bromodichloromethane	ND		10	5.0	ug/L			01/16/20 16:51	10
Bromoform	ND		50	7.1	ug/L			01/16/20 16:51	10
Bromomethane	ND		10	9.8	ug/L			01/16/20 16:51	10
2-Butanone (MEK)	ND		250	26	ug/L			01/16/20 16:51	10
Carbon disulfide	ND		10	5.0	ug/L			01/16/20 16:51	10
Carbon tetrachloride	ND		10	5.0	ug/L			01/16/20 16:51	10
Chlorobenzene	ND		10	5.0	ug/L			01/16/20 16:51	10
Dibromochloromethane	ND		10	5.0	ug/L			01/16/20 16:51	10
Chloroethane	ND		10	7.6	ug/L			01/16/20 16:51	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			01/16/20 16:51	10
Chloroform	ND		10	6.0	ug/L			01/16/20 16:51	10
1-Chlorohexane	ND		10	7.0	ug/L			01/16/20 16:51	10
Chloromethane	ND		10	8.3	ug/L			01/16/20 16:51	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			01/16/20 16:51	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			01/16/20 16:51	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			01/16/20 16:51	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			01/16/20 16:51	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			01/16/20 16:51	10
Dichlorodifluoromethane	ND	UJ	10	8.5	ug/L			01/16/20 16:51	10
1,1-Dichloroethane	ND		10	5.0	ug/L			01/16/20 16:51	10
1,2-Dichloroethane	ND		10	5.0	ug/L			01/16/20 16:51	10
1,1-Dichloroethene	ND		10	5.0	ug/L			01/16/20 16:51	10
1,2-Dichloropropane	ND		10	5.0	ug/L			01/16/20 16:51	10
1,3-Dichloropropane	ND		10	5.0	ug/L			01/16/20 16:51	10
2,2-Dichloropropane	ND		10	5.0	ug/L			01/16/20 16:51	10
1,1-Dichloropropene	ND		10	5.0	ug/L			01/16/20 16:51	10
Ethylbenzene	250		10	5.0	ug/L			01/16/20 16:51	10
Ethyl methacrylate	ND		10	6.0	ug/L			01/16/20 16:51	10
Hexachlorobutadiene	ND		50	9.0	ug/L			01/16/20 16:51	10
2-Hexanone	ND		250	31	ug/L			01/16/20 16:51	10
Isopropylbenzene	29		10	5.3	ug/L			01/16/20 16:51	10
Methylene bromide	ND		50	5.9	ug/L			01/16/20 16:51	10
Methylene Chloride	ND		50	30	ug/L			01/16/20 16:51	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			01/16/20 16:51	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			01/16/20 16:51	10
m-Xylene & p-Xylene	330		50	16	ug/L			01/16/20 16:51	10
Naphthalene	140		10	10	ug/L			01/16/20 16:51	10
n-Butylbenzene	ND		10	7.6	ug/L			01/16/20 16:51	10
N-Propylbenzene	48		10	6.9	ug/L			01/16/20 16:51	10
o-Chlorotoluene	ND		10	5.7	ug/L			01/16/20 16:51	10
o-Xylene	55		50	6.0	ug/L			01/16/20 16:51	10
p-Chlorotoluene	ND		10	5.6	ug/L			01/16/20 16:51	10
p-Isopropyltoluene	ND		10	7.1	ug/L			01/16/20 16:51	10

Client Sample ID: P59-ROX-010920
Date Collected: 01/09/20 09:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			01/16/20 16:51	10
Styrene	ND		10	10	ug/L			01/16/20 16:51	10
tert-Butylbenzene	ND		10	6.3	ug/L			01/16/20 16:51	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			01/16/20 16:51	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			01/16/20 16:51	10
Tetrachloroethene	ND		10	5.8	ug/L			01/16/20 16:51	10
Toluene	280		10	4.1	ug/L			01/16/20 16:51	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			01/16/20 16:51	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			01/16/20 16:51	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			01/16/20 16:51	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			01/16/20 16:51	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			01/16/20 16:51	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			01/16/20 16:51	10
Trichloroethene	ND		10	5.0	ug/L			01/16/20 16:51	10
Trichlorofluoromethane	ND		10	5.2	ug/L			01/16/20 16:51	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			01/16/20 16:51	10
1,2,4-Trimethylbenzene	190		10	8.2	ug/L			01/16/20 16:51	10
1,3,5-Trimethylbenzene	55		10	5.6	ug/L			01/16/20 16:51	10
Vinyl acetate	ND		250	20	ug/L			01/16/20 16:51	10
Vinyl chloride	ND		10	5.0	ug/L			01/16/20 16:51	10
Xylenes, Total	390		100	16	ug/L			01/16/20 16:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*01/16/20 16:51*	*10*
Dibromofluoromethane	*94*		*81 - 121*		*01/16/20 16:51*	*10*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/16/20 16:51*	*10*

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	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/20/20 23:59	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/20/20 23:59	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
1-Methylnaphthalene	15		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1
2-Methylnaphthalene	13		0.19	0.019	ug/L		01/15/20 18:07	01/20/20 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*48*		*33 - 138*	*01/15/20 18:07*	*01/20/20 23:59*	*1*
2-Fluorobiphenyl	*54*		*15 - 122*	*01/15/20 18:07*	*01/20/20 23:59*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	41		19 - 130	01/15/20 18:07	01/20/20 23:59	1

* Do not use this data. Use re-extraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 22:16	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 22:16	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 22:16	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:16	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 22:16	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 22:16	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 22:16	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~23~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/21/20 22:16~~	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 22:16	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 22:16	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:16	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 22:16	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 22:16	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 22:16	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:16	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 22:16	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 22:16	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 22:16	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/15/20 18:07	01/21/20 22:16	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 22:16	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 22:16	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 22:16	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:16	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 22:16	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 22:16	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 22:16	1
Indene	1.5	J	9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:16	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 22:16	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 22:16	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 22:16	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 22:16	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 22:16	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 22:16	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 22:16	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 22:16	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 22:16	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 22:16	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 22:16	1

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

Job ID: 400-182356-1

Client Sample ID: P59-ROX-010920
Date Collected: 01/09/20 09:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 22:16	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 22:16	1
Phenol	11		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 22:16	1
Pyridine	3.5	J	9.6	3.1	ug/L		01/15/20 18:07	01/21/20 22:16	1
Quinoline	ND		9.6	5.7	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/21/20 22:16	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*34 - 120*	*01/15/20 18:07*	*01/21/20 22:16*	*1*
2-Fluorophenol	*45*		*10 - 120*	*01/15/20 18:07*	*01/21/20 22:16*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*01/15/20 18:07*	*01/21/20 22:16*	*1*
Phenol-d5	*62*		*10 - 120*	*01/15/20 18:07*	*01/21/20 22:16*	*1*
Terphenyl-d14	*58*		*53 - 125*	*01/15/20 18:07*	*01/21/20 22:16*	*1*
2,4,6-Tribromophenol	*106*		*15 - 135*	*01/15/20 18:07*	*01/21/20 22:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 14:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H * UJ	9.5	4.8	ug/L		01/23/20 10:36	01/30/20 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*01/23/20 10:36*	*01/30/20 17:31*	*1*
2-Fluorophenol	*42*		*10 - 120*	*01/23/20 10:36*	*01/30/20 17:31*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*01/23/20 10:36*	*01/30/20 17:31*	*1*
Phenol-d5	*62*		*10 - 120*	*01/23/20 10:36*	*01/30/20 17:31*	*1*
Terphenyl-d14	*28*	*X*	*53 - 125*	*01/23/20 10:36*	*01/30/20 17:31*	*1*
2,4,6-Tribromophenol	*107*		*15 - 135*	*01/23/20 10:36*	*01/30/20 17:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		01/22/20 12:08	01/23/20 01:49	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/23/20 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/22/20 12:08*	*01/23/20 01:49*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: P57-ROX-010920

Lab Sample ID: 400-182356-11

Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			01/16/20 16:23	5
Acrolein	ND		100	50	ug/L			01/16/20 16:23	5
Acrylonitrile	ND		50	14	ug/L			01/16/20 16:23	5
Benzene	1300		5.0	1.9	ug/L			01/16/20 16:23	5
Bromobenzene	ND		5.0	2.7	ug/L			01/16/20 16:23	5
Bromochloromethane	ND		5.0	2.6	ug/L			01/16/20 16:23	5
Bromodichloromethane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Bromoform	ND		25	3.6	ug/L			01/16/20 16:23	5
Bromomethane	ND		5.0	4.9	ug/L			01/16/20 16:23	5
2-Butanone (MEK)	ND		130	13	ug/L			01/16/20 16:23	5
Carbon disulfide	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Chlorobenzene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Dibromochloromethane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Chloroethane	ND		5.0	3.8	ug/L			01/16/20 16:23	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			01/16/20 16:23	5
Chloroform	ND		5.0	3.0	ug/L			01/16/20 16:23	5
1-Chlorohexane	ND		5.0	3.5	ug/L			01/16/20 16:23	5
Chloromethane	ND		5.0	4.2	ug/L			01/16/20 16:23	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			01/16/20 16:23	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			01/16/20 16:23	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			01/16/20 16:23	5
Dichlorodifluoromethane	ND	UJ	5.0	4.3	ug/L			01/16/20 16:23	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Ethylbenzene	5.4		5.0	2.5	ug/L			01/16/20 16:23	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			01/16/20 16:23	5
Hexachlorobutadiene	ND		25	4.5	ug/L			01/16/20 16:23	5
2-Hexanone	ND		130	16	ug/L			01/16/20 16:23	5
Isopropylbenzene	14		5.0	2.7	ug/L			01/16/20 16:23	5
Methylene bromide	ND		25	3.0	ug/L			01/16/20 16:23	5
Methylene Chloride	ND		25	15	ug/L			01/16/20 16:23	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			01/16/20 16:23	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			01/16/20 16:23	5
m-Xylene & p-Xylene	ND		25	8.0	ug/L			01/16/20 16:23	5
Naphthalene	49		5.0	5.0	ug/L			01/16/20 16:23	5
n-Butylbenzene	ND		5.0	3.8	ug/L			01/16/20 16:23	5
N-Propylbenzene	15		5.0	3.5	ug/L			01/16/20 16:23	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			01/16/20 16:23	5
o-Xylene	ND		25	3.0	ug/L			01/16/20 16:23	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			01/16/20 16:23	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			01/16/20 16:23	5

Client Sample ID: P57-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			01/16/20 16:23	5
Styrene	ND		5.0	5.0	ug/L			01/16/20 16:23	5
tert-Butylbenzene	4.4	J	5.0	3.2	ug/L			01/16/20 16:23	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			01/16/20 16:23	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Tetrachloroethene	ND		5.0	2.9	ug/L			01/16/20 16:23	5
Toluene	6.2		5.0	2.1	ug/L			01/16/20 16:23	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			01/16/20 16:23	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			01/16/20 16:23	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			01/16/20 16:23	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			01/16/20 16:23	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			01/16/20 16:23	5
Trichloroethene	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			01/16/20 16:23	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			01/16/20 16:23	5
1,2,4-Trimethylbenzene	ND		5.0	4.1	ug/L			01/16/20 16:23	5
1,3,5-Trimethylbenzene	ND		5.0	2.8	ug/L			01/16/20 16:23	5
Vinyl acetate	ND		130	10	ug/L			01/16/20 16:23	5
Vinyl chloride	ND		5.0	2.5	ug/L			01/16/20 16:23	5
Xylenes, Total	ND		50	8.0	ug/L			01/16/20 16:23	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*01/16/20 16:23*	*5*
Dibromofluoromethane	*95*		*81 - 121*		*01/16/20 16:23*	*5*
Toluene-d8 (Surr)	*110*		*80 - 120*		*01/16/20 16:23*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.26		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
Fluorene	0.40		0.19	0.020	ug/L		01/15/20 18:07	01/21/20 15:47	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 15:47	1
Phenanthrene	0.34		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
1-Methylnaphthalene	28		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1
2-Methylnaphthalene	33		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*33 - 138*	*01/15/20 18:07*	*01/21/20 15:47*	*1*
2-Fluorobiphenyl	*67*		*15 - 122*	*01/15/20 18:07*	*01/21/20 15:47*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: P57-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	85		19 - 130	01/15/20 18:07	01/21/20 15:47	1

* Do not use this data. Use reextraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 22:37	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 22:37	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 22:37	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:37	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 22:37	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 22:37	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/15/20 18:07	01/21/20 22:37	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~11~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/21/20 22:37~~	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 22:37	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 22:37	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:37	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 22:37	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 22:37	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 22:37	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:37	1
Dibenzofuran	0.62	J	9.6	0.50	ug/L		01/15/20 18:07	01/21/20 22:37	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 22:37	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:37	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/15/20 18:07	01/21/20 22:37	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 22:37	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 22:37	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 22:37	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:37	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 22:37	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 22:37	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 22:37	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:37	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 22:37	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 22:37	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/15/20 18:07	01/21/20 22:37	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 22:37	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 22:37	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 22:37	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 22:37	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 22:37	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 22:37	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:37	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 22:37	1

Client Sample ID: P57-ROX-010920
Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 22:37	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 22:37	1
Phenol	33		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 22:37	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 22:37	1
Quinoline	ND		9.6	5.7	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/21/20 22:37	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 120*	*01/15/20 18:07*	*01/21/20 22:37*	*1*
2-Fluorophenol	*66*		*10 - 120*	*01/15/20 18:07*	*01/21/20 22:37*	*1*
Nitrobenzene-d5	*80*		*27 - 120*	*01/15/20 18:07*	*01/21/20 22:37*	*1*
Phenol-d5	*72*		*10 - 120*	*01/15/20 18:07*	*01/21/20 22:37*	*1*
Terphenyl-d14	*91*		*53 - 125*	*01/15/20 18:07*	*01/21/20 22:37*	*1*
2,4,6-Tribromophenol	*113*		*15 - 135*	*01/15/20 18:07*	*01/21/20 22:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 15:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H * US	9.5	4.7	ug/L		01/23/20 10:36	01/29/20 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*127*	*X*	*34 - 120*	*01/23/20 10:36*	*01/29/20 22:21*	*1*
2-Fluorophenol	*61*		*10 - 120*	*01/23/20 10:36*	*01/29/20 22:21*	*1*
Nitrobenzene-d5	*107*		*27 - 120*	*01/23/20 10:36*	*01/29/20 22:21*	*1*
Phenol-d5	*100*		*10 - 120*	*01/23/20 10:36*	*01/29/20 22:21*	*1*
Terphenyl-d14	*94*		*53 - 125*	*01/23/20 10:36*	*01/29/20 22:21*	*1*
2,4,6-Tribromophenol	*168*	*X*	*15 - 135*	*01/23/20 10:36*	*01/29/20 22:21*	*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	*	0.032	0.0059	ug/L		01/13/20 08:57	01/14/20 16:30	1
1,2-Dibromoethane	ND		0.022	0.0054	ug/L		01/13/20 08:57	01/14/20 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 16:30*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: T12-ROX-010920
Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-12
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			01/16/20 17:20	10
Acrolein	ND		200	100	ug/L			01/16/20 17:20	10
Acrylonitrile	ND		100	28	ug/L			01/16/20 17:20	10
Benzene	1700		10	3.8	ug/L			01/16/20 17:20	10
Bromobenzene	ND		10	5.4	ug/L			01/16/20 17:20	10
Bromochloromethane	ND		10	5.2	ug/L			01/16/20 17:20	10
Bromodichloromethane	ND		10	5.0	ug/L			01/16/20 17:20	10
Bromoform	ND		50	7.1	ug/L			01/16/20 17:20	10
Bromomethane	ND		10	9.8	ug/L			01/16/20 17:20	10
2-Butanone (MEK)	ND		250	26	ug/L			01/16/20 17:20	10
Carbon disulfide	ND		10	5.0	ug/L			01/16/20 17:20	10
Carbon tetrachloride	ND		10	5.0	ug/L			01/16/20 17:20	10
Chlorobenzene	ND		10	5.0	ug/L			01/16/20 17:20	10
Dibromochloromethane	ND		10	5.0	ug/L			01/16/20 17:20	10
Chloroethane	ND		10	7.6	ug/L			01/16/20 17:20	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			01/16/20 17:20	10
Chloroform	ND		10	6.0	ug/L			01/16/20 17:20	10
1-Chlorohexane	ND		10	7.0	ug/L			01/16/20 17:20	10
Chloromethane	ND		10	8.3	ug/L			01/16/20 17:20	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			01/16/20 17:20	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			01/16/20 17:20	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			01/16/20 17:20	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			01/16/20 17:20	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			01/16/20 17:20	10
Dichlorodifluoromethane	ND	UJ	10	8.5	ug/L			01/16/20 17:20	10
1,1-Dichloroethane	ND		10	5.0	ug/L			01/16/20 17:20	10
1,2-Dichloroethane	ND		10	5.0	ug/L			01/16/20 17:20	10
1,1-Dichloroethene	ND		10	5.0	ug/L			01/16/20 17:20	10
1,2-Dichloropropane	ND		10	5.0	ug/L			01/16/20 17:20	10
1,3-Dichloropropane	ND		10	5.0	ug/L			01/16/20 17:20	10
2,2-Dichloropropane	ND		10	5.0	ug/L			01/16/20 17:20	10
1,1-Dichloropropene	ND		10	5.0	ug/L			01/16/20 17:20	10
Ethylbenzene	34		10	5.0	ug/L			01/16/20 17:20	10
Ethyl methacrylate	ND		10	6.0	ug/L			01/16/20 17:20	10
Hexachlorobutadiene	ND		50	9.0	ug/L			01/16/20 17:20	10
2-Hexanone	ND		250	31	ug/L			01/16/20 17:20	10
Isopropylbenzene	5.4	J	10	5.3	ug/L			01/16/20 17:20	10
Methylene bromide	ND		50	5.9	ug/L			01/16/20 17:20	10
Methylene Chloride	ND		50	30	ug/L			01/16/20 17:20	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			01/16/20 17:20	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			01/16/20 17:20	10
m-Xylene & p-Xylene	130		50	16	ug/L			01/16/20 17:20	10
Naphthalene	53		10	10	ug/L			01/16/20 17:20	10
n-Butylbenzene	ND		10	7.6	ug/L			01/16/20 17:20	10
N-Propylbenzene	9.6	J	10	6.9	ug/L			01/16/20 17:20	10
o-Chlorotoluene	ND		10	5.7	ug/L			01/16/20 17:20	10
o-Xylene	ND		50	6.0	ug/L			01/16/20 17:20	10
p-Chlorotoluene	ND		10	5.6	ug/L			01/16/20 17:20	10
p-Isopropyltoluene	ND		10	7.1	ug/L			01/16/20 17:20	10

Client Sample ID: T12-ROX-010920
Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			01/16/20 17:20	10
Styrene	ND		10	10	ug/L			01/16/20 17:20	10
tert-Butylbenzene	ND		10	6.3	ug/L			01/16/20 17:20	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			01/16/20 17:20	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			01/16/20 17:20	10
Tetrachloroethene	ND		10	5.8	ug/L			01/16/20 17:20	10
Toluene	38		10	4.1	ug/L			01/16/20 17:20	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			01/16/20 17:20	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			01/16/20 17:20	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			01/16/20 17:20	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			01/16/20 17:20	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			01/16/20 17:20	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			01/16/20 17:20	10
Trichloroethene	ND		10	5.0	ug/L			01/16/20 17:20	10
Trichlorofluoromethane	ND		10	5.2	ug/L			01/16/20 17:20	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			01/16/20 17:20	10
1,2,4-Trimethylbenzene	20		10	8.2	ug/L			01/16/20 17:20	10
1,3,5-Trimethylbenzene	8.3	J	10	5.6	ug/L			01/16/20 17:20	10
Vinyl acetate	ND		250	20	ug/L			01/16/20 17:20	10
Vinyl chloride	ND		10	5.0	ug/L			01/16/20 17:20	10
Xylenes, Total	140		100	16	ug/L			01/16/20 17:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*78 - 118*		*01/16/20 17:20*	*10*
Dibromofluoromethane	*85*		*81 - 121*		*01/16/20 17:20*	*10*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/16/20 17:20*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.44	J	0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/21/20 16:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:06	1
Phenanthrene	0.80		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1
1-Methylnaphthalene	28		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*33 - 138*	*01/15/20 18:07*	*01/21/20 16:06*	*1*
2-Fluorobiphenyl	*46*		*15 - 122*	*01/15/20 18:07*	*01/21/20 16:06*	*1*
Nitrobenzene-d5	*82*		*19 - 130*	*01/15/20 18:07*	*01/21/20 16:06*	*1*

Client Sample ID: T12-ROX-010920

Lab Sample ID: 400-182356-12
Matrix: Water

Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	39		0.96	0.096	ug/L		01/15/20 18:07	01/22/20 17:22	5

* Do not use this data. Use re-extraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 22:58	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 22:58	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 22:58	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:58	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 22:58	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 22:58	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 22:58	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~11~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/21/20 22:58~~	~~1~~
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 22:58	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 22:58	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:58	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 22:58	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 22:58	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 22:58	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:58	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 22:58	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 22:58	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:58	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/15/20 18:07	01/21/20 22:58	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 22:58	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 22:58	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 22:58	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:58	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 22:58	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 22:58	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 22:58	1
Indene	1.7	J	9.6	0.96	ug/L		01/15/20 18:07	01/21/20 22:58	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 22:58	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 22:58	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 22:58	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 22:58	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 22:58	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 22:58	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 22:58	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 22:58	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 22:58	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:58	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 22:58	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 22:58	1

Client Sample ID: T12-ROX-010920
Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 22:58	1
Phenol	60		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 22:58	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 22:58	1
Quinoline	ND		9.6	5.7	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/21/20 22:58	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*34 - 120*	*01/15/20 18:07*	*01/21/20 22:58*	*1*
2-Fluorophenol	*47*		*10 - 120*	*01/15/20 18:07*	*01/21/20 22:58*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*01/15/20 18:07*	*01/21/20 22:58*	*1*
Phenol-d5	*60*		*10 - 120*	*01/15/20 18:07*	*01/21/20 22:58*	*1*
Terphenyl-d14	*96*		*53 - 125*	*01/15/20 18:07*	*01/21/20 22:58*	*1*
2,4,6-Tribromophenol	*106*		*15 - 135*	*01/15/20 18:07*	*01/21/20 22:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 15:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H *	9.5	4.7	ug/L		01/23/20 10:36	01/29/20 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 120*	*01/23/20 10:36*	*01/29/20 22:42*	*1*
2-Fluorophenol	*64*		*10 - 120*	*01/23/20 10:36*	*01/29/20 22:42*	*1*
Nitrobenzene-d5	*90*		*27 - 120*	*01/23/20 10:36*	*01/29/20 22:42*	*1*
Phenol-d5	*45*		*10 - 120*	*01/23/20 10:36*	*01/29/20 22:42*	*1*
Terphenyl-d14	*68*		*53 - 125*	*01/23/20 10:36*	*01/29/20 22:42*	*1*
2,4,6-Tribromophenol	*125*		*15 - 135*	*01/23/20 10:36*	*01/29/20 22:42*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.034	0.0063	ug/L		01/13/20 08:57	01/14/20 16:50	1
1,2-Dibromoethane	ND		0.023	0.0057	ug/L		01/13/20 08:57	01/14/20 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 16:50*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: T12-ROX-010920-DUP
Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-13
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			01/16/20 17:48	10
Acrolein	ND		200	100	ug/L			01/16/20 17:48	10
Acrylonitrile	ND		100	28	ug/L			01/16/20 17:48	10
Benzene	1800		10	3.8	ug/L			01/16/20 17:48	10
Bromobenzene	ND		10	5.4	ug/L			01/16/20 17:48	10
Bromochloromethane	ND		10	5.2	ug/L			01/16/20 17:48	10
Bromodichloromethane	ND		10	5.0	ug/L			01/16/20 17:48	10
Bromoform	ND		50	7.1	ug/L			01/16/20 17:48	10
Bromomethane	ND		10	9.8	ug/L			01/16/20 17:48	10
2-Butanone (MEK)	ND		250	26	ug/L			01/16/20 17:48	10
Carbon disulfide	ND		10	5.0	ug/L			01/16/20 17:48	10
Carbon tetrachloride	ND		10	5.0	ug/L			01/16/20 17:48	10
Chlorobenzene	ND		10	5.0	ug/L			01/16/20 17:48	10
Dibromochloromethane	ND		10	5.0	ug/L			01/16/20 17:48	10
Chloroethane	ND		10	7.6	ug/L			01/16/20 17:48	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			01/16/20 17:48	10
Chloroform	ND		10	6.0	ug/L			01/16/20 17:48	10
1-Chlorohexane	ND		10	7.0	ug/L			01/16/20 17:48	10
Chloromethane	ND		10	8.3	ug/L			01/16/20 17:48	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			01/16/20 17:48	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			01/16/20 17:48	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			01/16/20 17:48	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			01/16/20 17:48	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			01/16/20 17:48	10
Dichlorodifluoromethane	ND	u5	10	8.5	ug/L			01/16/20 17:48	10
1,1-Dichloroethane	ND		10	5.0	ug/L			01/16/20 17:48	10
1,2-Dichloroethane	ND		10	5.0	ug/L			01/16/20 17:48	10
1,1-Dichloroethene	ND		10	5.0	ug/L			01/16/20 17:48	10
1,2-Dichloropropane	ND		10	5.0	ug/L			01/16/20 17:48	10
1,3-Dichloropropane	ND		10	5.0	ug/L			01/16/20 17:48	10
2,2-Dichloropropane	ND		10	5.0	ug/L			01/16/20 17:48	10
1,1-Dichloropropene	ND		10	5.0	ug/L			01/16/20 17:48	10
Ethylbenzene	37		10	5.0	ug/L			01/16/20 17:48	10
Ethyl methacrylate	ND		10	6.0	ug/L			01/16/20 17:48	10
Hexachlorobutadiene	ND		50	9.0	ug/L			01/16/20 17:48	10
2-Hexanone	ND		250	31	ug/L			01/16/20 17:48	10
Isopropylbenzene	5.6	J	10	5.3	ug/L			01/16/20 17:48	10
Methylene bromide	ND		50	5.9	ug/L			01/16/20 17:48	10
Methylene Chloride	ND		50	30	ug/L			01/16/20 17:48	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			01/16/20 17:48	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			01/16/20 17:48	10
m-Xylene & p-Xylene	150		50	16	ug/L			01/16/20 17:48	10
Naphthalene	57		10	10	ug/L			01/16/20 17:48	10
n-Butylbenzene	ND		10	7.6	ug/L			01/16/20 17:48	10
N-Propylbenzene	9.7	J	10	6.9	ug/L			01/16/20 17:48	10
o-Chlorotoluene	ND		10	5.7	ug/L			01/16/20 17:48	10
o-Xylene	ND		50	6.0	ug/L			01/16/20 17:48	10
p-Chlorotoluene	ND		10	5.6	ug/L			01/16/20 17:48	10
p-Isopropyltoluene	ND		10	7.1	ug/L			01/16/20 17:48	10

Client Sample ID: T12-ROX-010920-DUP
Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			01/16/20 17:48	10
Styrene	ND		10	10	ug/L			01/16/20 17:48	10
tert-Butylbenzene	ND		10	6.3	ug/L			01/16/20 17:48	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			01/16/20 17:48	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			01/16/20 17:48	10
Tetrachloroethene	ND		10	5.8	ug/L			01/16/20 17:48	10
Toluene	43		10	4.1	ug/L			01/16/20 17:48	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			01/16/20 17:48	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			01/16/20 17:48	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			01/16/20 17:48	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			01/16/20 17:48	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			01/16/20 17:48	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			01/16/20 17:48	10
Trichloroethene	ND		10	5.0	ug/L			01/16/20 17:48	10
Trichlorofluoromethane	ND		10	5.2	ug/L			01/16/20 17:48	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			01/16/20 17:48	10
1,2,4-Trimethylbenzene	23		10	8.2	ug/L			01/16/20 17:48	10
1,3,5-Trimethylbenzene	8.7	J	10	5.6	ug/L			01/16/20 17:48	10
Vinyl acetate	ND		250	20	ug/L			01/16/20 17:48	10
Vinyl chloride	ND		10	5.0	ug/L			01/16/20 17:48	10
Xylenes, Total	160		100	16	ug/L			01/16/20 17:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*01/16/20 17:48*	*10*
Dibromofluoromethane	*94*		*81 - 121*		*01/16/20 17:48*	*10*
Toluene-d8 (Surr)	*108*		*80 - 120*		*01/16/20 17:48*	*10*

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	0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1
Fluorene	0.30		0.19	0.020	ug/L		01/15/20 18:07	01/21/20 16:24	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:24	1
Phenanthrene	0.80		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1
1-Methylnaphthalene	30		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*33 - 138*	*01/15/20 18:07*	*01/21/20 16:24*	*1*
2-Fluorobiphenyl	*50*		*15 - 122*	*01/15/20 18:07*	*01/21/20 16:24*	*1*
Nitrobenzene-d5	*88*		*19 - 130*	*01/15/20 18:07*	*01/21/20 16:24*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: T12-ROX-010920-DUP

Lab Sample ID: 400-182356-13

Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

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
2-Methylnaphthalene	40		0.96	0.096	ug/L		01/15/20 18:07	01/22/20 17:40	5

*Do not use this data. Use re-extraction (RE) data.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 23:20	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 23:20	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 23:20	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 23:20	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 23:20	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 23:20	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 23:20	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~39~~	~~B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/21/20 23:20~~	~~1~~
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 23:20	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 23:20	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 23:20	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/15/20 18:07	01/21/20 23:20	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 23:20	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 23:20	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 23:20	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 23:20	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 23:20	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 23:20	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/15/20 18:07	01/21/20 23:20	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 23:20	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 23:20	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 23:20	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 23:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 23:20	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 23:20	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 23:20	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 23:20	1
Indene	1.9	J	9.6	0.96	ug/L		01/15/20 18:07	01/21/20 23:20	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 23:20	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 23:20	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 23:20	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 23:20	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 23:20	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 23:20	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 23:20	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 23:20	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 23:20	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 23:20	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 23:20	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 23:20	1

Client Sample ID: T12-ROX-010920-DUP

Lab Sample ID: 400-182356-13

Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 23:20	1
Phenol	71		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 23:20	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 23:20	1
Quinoline	ND		9.6	5.8	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 23:20	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/21/20 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*01/15/20 18:07*	*01/21/20 23:20*	*1*
2-Fluorophenol	*64*		*10 - 120*	*01/15/20 18:07*	*01/21/20 23:20*	*1*
Nitrobenzene-d5	*89*		*27 - 120*	*01/15/20 18:07*	*01/21/20 23:20*	*1*
Phenol-d5	*69*		*10 - 120*	*01/15/20 18:07*	*01/21/20 23:20*	*1*
Terphenyl-d14	*84*		*53 - 125*	*01/15/20 18:07*	*01/21/20 23:20*	*1*
2,4,6-Tribromophenol	*119*		*15 - 135*	*01/15/20 18:07*	*01/21/20 23:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 15:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H * U J	9.5	4.7	ug/L		01/23/20 10:36	01/29/20 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*34 - 120*	*01/23/20 10:36*	*01/29/20 23:03*	*1*
2-Fluorophenol	*51*		*10 - 120*	*01/23/20 10:36*	*01/29/20 23:03*	*1*
Nitrobenzene-d5	*91*		*27 - 120*	*01/23/20 10:36*	*01/29/20 23:03*	*1*
Phenol-d5	*69*		*10 - 120*	*01/23/20 10:36*	*01/29/20 23:03*	*1*
Terphenyl-d14	*73*		*53 - 125*	*01/23/20 10:36*	*01/29/20 23:03*	*1*
2,4,6-Tribromophenol	*128*		*15 - 135*	*01/23/20 10:36*	*01/29/20 23:03*	*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	*	0.031	0.0056	ug/L		01/13/20 08:57	01/14/20 17:11	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		01/13/20 08:57	01/14/20 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 17:11*	*1*

Client Sample Results

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

Job ID: 400-182356-1

Client Sample ID: P93A-ROX-010920

Lab Sample ID: 400-182356-14

Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			01/16/20 18:16	500
Acrolein	ND		10000	5000	ug/L			01/16/20 18:16	500
Acrylonitrile	ND		5000	1400	ug/L			01/16/20 18:16	500
Benzene	56000		500	190	ug/L			01/16/20 18:16	500
Bromobenzene	ND		500	270	ug/L			01/16/20 18:16	500
Bromochloromethane	ND		500	260	ug/L			01/16/20 18:16	500
Bromodichloromethane	ND		500	250	ug/L			01/16/20 18:16	500
Bromoform	ND		2500	360	ug/L			01/16/20 18:16	500
Bromomethane	ND		500	490	ug/L			01/16/20 18:16	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/16/20 18:16	500
Carbon disulfide	ND		500	250	ug/L			01/16/20 18:16	500
Carbon tetrachloride	ND		500	250	ug/L			01/16/20 18:16	500
Chlorobenzene	ND		500	250	ug/L			01/16/20 18:16	500
Dibromochloromethane	ND		500	250	ug/L			01/16/20 18:16	500
Chloroethane	ND		500	380	ug/L			01/16/20 18:16	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/16/20 18:16	500
Chloroform	ND		500	300	ug/L			01/16/20 18:16	500
1-Chlorohexane	ND		500	350	ug/L			01/16/20 18:16	500
Chloromethane	ND		500	420	ug/L			01/16/20 18:16	500
cis-1,2-Dichloroethene	ND		500	250	ug/L			01/16/20 18:16	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/16/20 18:16	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/16/20 18:16	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/16/20 18:16	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/16/20 18:16	500
Dichlorodifluoromethane	ND	U5	500	430	ug/L			01/16/20 18:16	500
1,1-Dichloroethane	ND		500	250	ug/L			01/16/20 18:16	500
1,2-Dichloroethane	ND		500	250	ug/L			01/16/20 18:16	500
1,1-Dichloroethene	ND		500	250	ug/L			01/16/20 18:16	500
1,2-Dichloropropane	ND		500	250	ug/L			01/16/20 18:16	500
1,3-Dichloropropane	ND		500	250	ug/L			01/16/20 18:16	500
2,2-Dichloropropane	ND		500	250	ug/L			01/16/20 18:16	500
1,1-Dichloropropene	ND		500	250	ug/L			01/16/20 18:16	500
Ethylbenzene	ND		500	250	ug/L			01/16/20 18:16	500
Ethyl methacrylate	ND		500	300	ug/L			01/16/20 18:16	500
Hexachlorobutadiene	ND		2500	450	ug/L			01/16/20 18:16	500
2-Hexanone	ND		13000	1600	ug/L			01/16/20 18:16	500
Isopropylbenzene	ND		500	270	ug/L			01/16/20 18:16	500
Methylene bromide	ND		2500	300	ug/L			01/16/20 18:16	500
Methylene Chloride	ND		2500	1500	ug/L			01/16/20 18:16	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/16/20 18:16	500
Methyl tert-butyl ether	ND		500	370	ug/L			01/16/20 18:16	500
m-Xylene & p-Xylene	ND		2500	800	ug/L			01/16/20 18:16	500
Naphthalene	ND		500	500	ug/L			01/16/20 18:16	500
n-Butylbenzene	ND		500	380	ug/L			01/16/20 18:16	500
N-Propylbenzene	ND		500	350	ug/L			01/16/20 18:16	500
o-Chlorotoluene	ND		500	290	ug/L			01/16/20 18:16	500
o-Xylene	ND		2500	300	ug/L			01/16/20 18:16	500
p-Chlorotoluene	ND		500	280	ug/L			01/16/20 18:16	500
p-Isopropyltoluene	ND		500	360	ug/L			01/16/20 18:16	500

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

Job ID: 400-182356-1

Client Sample ID: P93A-ROX-010920
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		500	350	ug/L			01/16/20 18:16	500
Styrene	ND		500	500	ug/L			01/16/20 18:16	500
tert-Butylbenzene	ND		500	320	ug/L			01/16/20 18:16	500
1,1,1,2-Tetrachloroethane	ND		500	260	ug/L			01/16/20 18:16	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/16/20 18:16	500
Tetrachloroethene	ND		500	290	ug/L			01/16/20 18:16	500
Toluene	ND		500	210	ug/L			01/16/20 18:16	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/16/20 18:16	500
trans-1,3-Dichloropropene	ND		2500	250	ug/L			01/16/20 18:16	500
1,2,3-Trichlorobenzene	ND		500	350	ug/L			01/16/20 18:16	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/16/20 18:16	500
1,1,1-Trichloroethane	ND		500	250	ug/L			01/16/20 18:16	500
1,1,2-Trichloroethane	ND		2500	250	ug/L			01/16/20 18:16	500
Trichloroethene	ND		500	250	ug/L			01/16/20 18:16	500
Trichlorofluoromethane	ND		500	260	ug/L			01/16/20 18:16	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/16/20 18:16	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/16/20 18:16	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/16/20 18:16	500
Vinyl acetate	ND		13000	1000	ug/L			01/16/20 18:16	500
Vinyl chloride	ND		500	250	ug/L			01/16/20 18:16	500
Xylenes, Total	ND		5000	800	ug/L			01/16/20 18:16	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*01/16/20 18:16*	*500*
Dibromofluoromethane	*94*		*81 - 121*		*01/16/20 18:16*	*500*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/16/20 18:16*	*500*

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	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/21/20 16:42	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 16:42	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
1-Methylnaphthalene	0.66		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1
2-Methylnaphthalene	0.30		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*33 - 138*	*01/15/20 18:07*	*01/21/20 16:42*	*1*
2-Fluorobiphenyl	*81*		*15 - 122*	*01/15/20 18:07*	*01/21/20 16:42*	*1*

Client Sample ID: P93A-ROX-010920
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-14
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	01/15/20 18:07	01/21/20 16:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 23:41	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/21/20 23:41	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/21/20 23:41	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 23:41	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 23:41	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/21/20 23:41	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/21/20 23:41	1
Bis(2-ethylhexyl) phthalate	~~6.1~~	J B UJ	9.6	4.8	ug/L		01/15/20 18:07	01/21/20 23:41	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/21/20 23:41	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/21/20 23:41	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 23:41	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/21/20 23:41	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 23:41	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 23:41	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/21/20 23:41	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/21/20 23:41	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/21/20 23:41	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 23:41	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/15/20 18:07	01/21/20 23:41	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/21/20 23:41	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/21/20 23:41	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/21/20 23:41	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 23:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 23:41	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/21/20 23:41	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/21/20 23:41	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/21/20 23:41	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/21/20 23:41	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/21/20 23:41	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 23:41	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/21/20 23:41	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/21/20 23:41	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/21/20 23:41	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/21/20 23:41	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/21/20 23:41	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/21/20 23:41	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/21/20 23:41	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 23:41	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/21/20 23:41	1

Client Sample ID: P93A-ROX-010920
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/21/20 23:41	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/21/20 23:41	1
Phenol	28		9.6	2.5	ug/L		01/15/20 18:07	01/21/20 23:41	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/21/20 23:41	1
Quinoline	ND		9.6	5.7	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/21/20 23:41	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/15/20 18:07	01/21/20 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*01/15/20 18:07*	*01/21/20 23:41*	*1*
2-Fluorophenol	*51*		*10 - 120*	*01/15/20 18:07*	*01/21/20 23:41*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*01/15/20 18:07*	*01/21/20 23:41*	*1*
Phenol-d5	*67*		*10 - 120*	*01/15/20 18:07*	*01/21/20 23:41*	*1*
Terphenyl-d14	*84*		*53 - 125*	*01/15/20 18:07*	*01/21/20 23:41*	*1*
2,4,6-Tribromophenol	*89*		*15 - 135*	*01/15/20 18:07*	*01/21/20 23:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 16:19	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	*	0.032	0.0058	ug/L		01/13/20 08:57	01/14/20 17:31	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		01/13/20 08:57	01/14/20 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 17:31*	*1*

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

Job ID: 400-182356-1

Client Sample ID: P93A-ROX-010920-DUP
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13000	5000	ug/L			01/16/20 18:44	500
Acrolein	ND		10000	5000	ug/L			01/16/20 18:44	500
Acrylonitrile	ND		5000	1400	ug/L			01/16/20 18:44	500
Benzene	57000		500	190	ug/L			01/16/20 18:44	500
Bromobenzene	ND		500	270	ug/L			01/16/20 18:44	500
Bromochloromethane	ND		500	260	ug/L			01/16/20 18:44	500
Bromodichloromethane	ND		500	250	ug/L			01/16/20 18:44	500
Bromoform	ND		2500	360	ug/L			01/16/20 18:44	500
Bromomethane	ND		500	490	ug/L			01/16/20 18:44	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/16/20 18:44	500
Carbon disulfide	ND		500	250	ug/L			01/16/20 18:44	500
Carbon tetrachloride	ND		500	250	ug/L			01/16/20 18:44	500
Chlorobenzene	ND		500	250	ug/L			01/16/20 18:44	500
Dibromochloromethane	ND		500	250	ug/L			01/16/20 18:44	500
Chloroethane	ND		500	380	ug/L			01/16/20 18:44	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/16/20 18:44	500
Chloroform	ND		500	300	ug/L			01/16/20 18:44	500
1-Chlorohexane	ND		500	350	ug/L			01/16/20 18:44	500
Chloromethane	ND		500	420	ug/L			01/16/20 18:44	500
cis-1,2-Dichloroethene	ND		500	250	ug/L			01/16/20 18:44	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/16/20 18:44	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/16/20 18:44	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/16/20 18:44	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/16/20 18:44	500
Dichlorodifluoromethane	ND	UJ	500	430	ug/L			01/16/20 18:44	500
1,1-Dichloroethane	ND		500	250	ug/L			01/16/20 18:44	500
1,2-Dichloroethane	ND		500	250	ug/L			01/16/20 18:44	500
1,1-Dichloroethene	ND		500	250	ug/L			01/16/20 18:44	500
1,2-Dichloropropane	ND		500	250	ug/L			01/16/20 18:44	500
1,3-Dichloropropane	ND		500	250	ug/L			01/16/20 18:44	500
2,2-Dichloropropane	ND		500	250	ug/L			01/16/20 18:44	500
1,1-Dichloropropene	ND		500	250	ug/L			01/16/20 18:44	500
Ethylbenzene	ND		500	250	ug/L			01/16/20 18:44	500
Ethyl methacrylate	ND		500	300	ug/L			01/16/20 18:44	500
Hexachlorobutadiene	ND		2500	450	ug/L			01/16/20 18:44	500
2-Hexanone	ND		13000	1600	ug/L			01/16/20 18:44	500
Isopropylbenzene	ND		500	270	ug/L			01/16/20 18:44	500
Methylene bromide	ND		2500	300	ug/L			01/16/20 18:44	500
Methylene Chloride	ND		2500	1500	ug/L			01/16/20 18:44	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/16/20 18:44	500
Methyl tert-butyl ether	ND		500	370	ug/L			01/16/20 18:44	500
m-Xylene & p-Xylene	ND		2500	800	ug/L			01/16/20 18:44	500
Naphthalene	ND		500	500	ug/L			01/16/20 18:44	500
n-Butylbenzene	ND		500	380	ug/L			01/16/20 18:44	500
N-Propylbenzene	ND		500	350	ug/L			01/16/20 18:44	500
o-Chlorotoluene	ND		500	290	ug/L			01/16/20 18:44	500
o-Xylene	ND		2500	300	ug/L			01/16/20 18:44	500
p-Chlorotoluene	ND		500	280	ug/L			01/16/20 18:44	500
p-Isopropyltoluene	ND		500	360	ug/L			01/16/20 18:44	500

Client Sample ID: P93A-ROX-010920-DUP
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		500	350	ug/L			01/16/20 18:44	500
Styrene	ND		500	500	ug/L			01/16/20 18:44	500
tert-Butylbenzene	ND		500	320	ug/L			01/16/20 18:44	500
1,1,1,2-Tetrachloroethane	ND		500	260	ug/L			01/16/20 18:44	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/16/20 18:44	500
Tetrachloroethene	ND		500	290	ug/L			01/16/20 18:44	500
Toluene	ND		500	210	ug/L			01/16/20 18:44	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/16/20 18:44	500
trans-1,3-Dichloropropene	ND		2500	250	ug/L			01/16/20 18:44	500
1,2,3-Trichlorobenzene	ND		500	350	ug/L			01/16/20 18:44	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/16/20 18:44	500
1,1,1-Trichloroethane	ND		500	250	ug/L			01/16/20 18:44	500
1,1,2-Trichloroethane	ND		2500	250	ug/L			01/16/20 18:44	500
Trichloroethene	ND		500	250	ug/L			01/16/20 18:44	500
Trichlorofluoromethane	ND		500	260	ug/L			01/16/20 18:44	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/16/20 18:44	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/16/20 18:44	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/16/20 18:44	500
Vinyl acetate	ND		13000	1000	ug/L			01/16/20 18:44	500
Vinyl chloride	ND		500	250	ug/L			01/16/20 18:44	500
Xylenes, Total	ND		5000	800	ug/L			01/16/20 18:44	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*01/16/20 18:44*	*500*
Dibromofluoromethane	*94*		*81 - 121*		*01/16/20 18:44*	*500*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/16/20 18:44*	*500*

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	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
Acenaphthylene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
Anthracene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Chrysene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Fluoranthene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
Fluorene	ND		0.19	0.020	ug/L		01/15/20 18:07	01/21/20 17:01	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:01	1
Phenanthrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
Pyrene	ND		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
1-Methylnaphthalene	0.76		0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1
2-Methylnaphthalene	0.16	J	0.19	0.019	ug/L		01/15/20 18:07	01/21/20 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*33 - 138*	*01/15/20 18:07*	*01/21/20 17:01*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*01/15/20 18:07*	*01/21/20 17:01*	*1*

Client Sample ID: P93A-ROX-010920-DUP
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-15
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	01/15/20 18:07	01/21/20 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/15/20 18:07	01/22/20 00:02	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/22/20 00:02	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/22/20 00:02	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/22/20 00:02	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/22/20 00:02	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/22/20 00:02	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/22/20 00:02	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/15/20 18:07	01/22/20 00:02	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/22/20 00:02	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/22/20 00:02	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/22/20 00:02	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/22/20 00:02	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/22/20 00:02	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/22/20 00:02	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/22/20 00:02	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/22/20 00:02	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 00:02	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/22/20 00:02	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/15/20 18:07	01/22/20 00:02	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/22/20 00:02	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/22/20 00:02	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/22/20 00:02	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/22/20 00:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/15/20 18:07	01/22/20 00:02	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/22/20 00:02	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/22/20 00:02	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/22/20 00:02	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/22/20 00:02	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/22/20 00:02	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/22/20 00:02	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/22/20 00:02	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/22/20 00:02	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/22/20 00:02	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/22/20 00:02	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/22/20 00:02	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/22/20 00:02	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/22/20 00:02	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/22/20 00:02	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/22/20 00:02	1

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

Job ID: 400-182356-1

Client Sample ID: P93A-ROX-010920-DUP
Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Lab Sample ID: 400-182356-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/22/20 00:02	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/22/20 00:02	1
Phenol	23		9.6	2.5	ug/L		01/15/20 18:07	01/22/20 00:02	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/22/20 00:02	1
Quinoline	ND		9.6	5.8	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/15/20 18:07	01/22/20 00:02	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/22/20 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 120*	*01/15/20 18:07*	*01/22/20 00:02*	*1*
2-Fluorophenol	*57*		*10 - 120*	*01/15/20 18:07*	*01/22/20 00:02*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*01/15/20 18:07*	*01/22/20 00:02*	*1*
Phenol-d5	*58*		*10 - 120*	*01/15/20 18:07*	*01/22/20 00:02*	*1*
Terphenyl-d14	*65*		*53 - 125*	*01/15/20 18:07*	*01/22/20 00:02*	*1*
2,4,6-Tribromophenol	*73*		*15 - 135*	*01/15/20 18:07*	*01/22/20 00:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 16:40	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		01/13/20 08:57	01/14/20 17:52	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		01/13/20 08:57	01/14/20 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 17:52*	*1*

Definitions/Glossary

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

Job ID: 400-182356-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery 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.
*	RPD of the LCS and LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance 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 is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside 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: 400-182356-1

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)
400-182356-1	TB-ROX-010920-8260-A	93	104	98
400-182356-3	MW16-ROX-010920	94	103	97
400-182356-3 MS	MW16-ROX-010920	94	103	96
400-182356-3 MSD	MW16-ROX-010920	94	106	97
400-182356-4	ROST3MW-ROX-010920	107	92	110
400-182356-5	MW26-ROX-010920	106	87	108
400-182356-6	MW1-ROX-010920	111	94	110
400-182356-7	MW2-ROX-010920	109	90	110
400-182356-8	TB-ROX-010920-8260-B	105	91	108
400-182356-10	P59-ROX-010920	108	94	108
400-182356-11	P57-ROX-010920	108	95	110
400-182356-12	T12-ROX-010920	104	85	108
400-182356-13	T12-ROX-010920-DUP	108	94	108
400-182356-14	P93A-ROX-010920	109	94	109
400-182356-15	P93A-ROX-010920-DUP	106	94	109
LCS 400-473981/1002	Lab Control Sample	96	104	97
LCS 400-474225/1002	Lab Control Sample	108	95	109
MB 400-473981/4	Method Blank	92	104	97
MB 400-474225/4	Method Blank	107	93	109

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)
400-182356-3	MW16-ROX-010920	80	60	77	69	93	60
400-182356-3 MS	MW16-ROX-010920	82	53	85	61	97	73
400-182356-3 MSD	MW16-ROX-010920	84	22	84	43	100	57
400-182356-4	ROST3MW-ROX-010920	74	67	74	72	90	69
400-182356-5	MW26-ROX-010920	64	24	60	33	99	43
400-182356-6	MW1-ROX-010920	56	18	54	27	77	29
400-182356-6 - RE	MW1-ROX-010920	136 X	27	116	50	134 X	79
400-182356-7	MW2-ROX-010920	63	49	61	59	95	86
400-182356-10	P59-ROX-010920	69	45	61	62	58	106
400-182356-10 - RE	P59-ROX-010920	78	42	62	62	28 X	107
400-182356-11	P57-ROX-010920	81	66	80	72	91	113
400-182356-11 - RE	P57-ROX-010920	127 X	61	107	100	94	168 X
400-182356-12	T12-ROX-010920	54	47	79	60	96	106
400-182356-12 - RE	T12-ROX-010920	81	64	90	45	68	125
400-182356-13	T12-ROX-010920-DUP	55	64	89	69	84	119
400-182356-13 - RE	T12-ROX-010920-DUP	79	51	91	69	73	128
400-182356-14	P93A-ROX-010920	72	51	71	67	84	89
400-182356-15	P93A-ROX-010920-DUP	77	57	76	58	65	73
LCS 400-474202/2-A	Lab Control Sample	84	64	87	80	105	102

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-182356-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (34-120)	2FP (10-120)	NBZ (27-120)	PHL (10-120)	TPHL (53-125)	TBP (15-135)
LCS 400-474202/3-A	Lab Control Sample	78	55	79	66	101	55
LCS 400-475158/2-A	Lab Control Sample	70	11	73	2 X	79	34
LCSD 400-474202/4-A	Lab Control Sample Dup	80	73	80	81	90	68
LCSD 400-475158/3-A	Lab Control Sample Dup	93	42	94	77	97	115
MB 400-474202/1-A	Method Blank	71	40	72	62	83	60
MB 400-475158/1-A	Method Blank	84	53	79	70	99	93

Surrogate Legend

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

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

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (33-138)	FBP (15-122)	NBZ (19-130)
400-182356-3	MW16-ROX-010920	104	86	82
400-182356-3 MS	MW16-ROX-010920	96	76	54
400-182356-3 MSD	MW16-ROX-010920	105	73	59
400-182356-4	ROST3MW-ROX-010920	105	74	74
400-182356-5	MW26-ROX-010920	91	61	58
400-182356-6	MW1-ROX-010920	74	52	54
400-182356-7	MW2-ROX-010920	87	61	67
400-182356-10	P59-ROX-010920	48	54	41
400-182356-11	P57-ROX-010920	95	67	85
400-182356-12	T12-ROX-010920	94	46	82
400-182356-13	T12-ROX-010920-DUP	88	50	88
400-182356-14	P93A-ROX-010920	109	81	75
400-182356-15	P93A-ROX-010920-DUP	78	86	69
LCS 400-474202/2-A	Lab Control Sample	101	77	74
MB 400-474202/1-A	Method Blank	95	76	66

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB2 (51-149)
400-182356-3	MW16-ROX-010920	110 p
400-182356-3 MS	MW16-ROX-010920	210 p X
400-182356-3 MSD	MW16-ROX-010920	119 p
400-182356-10	P59-ROX-010920	89

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-182356-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-182356-11	P57-ROX-010920	101 p
400-182356-12	T12-ROX-010920	96 p
400-182356-13	T12-ROX-010920-DUP	94 p
400-182356-14	P93A-ROX-010920	112 p
400-182356-15	P93A-ROX-010920-DUP	106 p
LCS 400-473741/2-A	Lab Control Sample	128 p
LCSD 400-473741/3-A	Lab Control Sample Dup	119
MB 400-473741/1-A	Method Blank	118 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-182356-2	TB-ROX-010920-8011-A	81
400-182356-4	ROST3MW-ROX-010920	79
400-182356-5	MW26-ROX-010920	79
400-182356-6	MW1-ROX-010920	75
400-182356-7	MW2-ROX-010920	66
400-182356-9	TB-ROX-010920-8260-B	79
LCS 400-474984/2-A	Lab Control Sample	106
LCSD 400-474984/3-A	Lab Control Sample Dup	103
MB 400-474984/1-A	Method Blank	89

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-182356-1

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: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-A

Lab Sample ID: 400-182356-1
Matrix: Water

Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

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	473981	01/14/20 17:27	RS	TAL PEN

Client Sample ID: TB-ROX-010920-8011-A

Lab Sample ID: 400-182356-2
Matrix: Water

Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 23:51	DS	TAL PEN

Client Sample ID: MW16-ROX-010920

Lab Sample ID: 400-182356-3
Matrix: Water

Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

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	473981	01/14/20 15:34	RS	TAL PEN
Total/NA	Prep	3520C			1044.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 19:47	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1044.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 13:07	VC1	TAL PEN
Total/NA	Prep	3520C			1044.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 21:51	PP1	TAL PEN
Total/NA	Prep	8011			33.7 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 18:12	KLR	TAL PEN

Client Sample ID: ROST3MW-ROX-010920

Lab Sample ID: 400-182356-4
Matrix: Water

Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

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	474225	01/16/20 14:29	AMB	TAL PEN
Total/NA	Prep	3520C			1046.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 20:51	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1046.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			475135	01/23/20 15:15	VC1	TAL PEN
Total/NA	Prep	3520C			1046.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 22:46	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 00:11	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: MW26-ROX-010920

Lab Sample ID: 400-182356-5

Date Collected: 01/09/20 11:10
Matrix: Water
Date Received: 01/10/20 09:01

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	474225	01/16/20 14:57	AMB	TAL PEN
Total/NA	Prep	3520C			1040.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 21:12	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1040.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 13:50	VC1	TAL PEN
Total/NA	Prep	3520C			1040.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 23:04	PP1	TAL PEN
Total/NA	Prep	8011			35.6 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 00:30	DS	TAL PEN

Client Sample ID: MW1-ROX-010920

Lab Sample ID: 400-182356-6

Date Collected: 01/09/20 12:00
Matrix: Water
Date Received: 01/10/20 09:01

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	474225	01/16/20 15:26	AMB	TAL PEN
Total/NA	Prep	3520C			1037.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 21:33	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1037.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 14:11	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1039.8 mL	1 mL	475158	01/23/20 10:36	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			476094	01/30/20 17:10	VC1	TAL PEN
Total/NA	Prep	3520C			1037.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 23:23	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 00:50	DS	TAL PEN

Client Sample ID: MW2-ROX-010920

Lab Sample ID: 400-182356-7

Date Collected: 01/09/20 13:10
Matrix: Water
Date Received: 01/10/20 09:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	474225	01/16/20 15:55	AMB	TAL PEN
Total/NA	Prep	3520C			1036.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 21:55	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1036.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 14:32	VC1	TAL PEN
Total/NA	Prep	3520C			1036.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 23:41	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 01:10	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: TB-ROX-010920-8260-B

Lab Sample ID: 400-182356-8
Matrix: Water

Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

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	474225	01/16/20 13:04	AMB	TAL PEN

Client Sample ID: TB-ROX-010920-8260-B

Lab Sample ID: 400-182356-9
Matrix: Water

Date Collected: 01/09/20 00:00
Date Received: 01/10/20 09:01

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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 01:30	DS	TAL PEN

Client Sample ID: P59-ROX-010920

Lab Sample ID: 400-182356-10
Matrix: Water

Date Collected: 01/09/20 09:15
Date Received: 01/10/20 09:01

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	474225	01/16/20 16:51	AMB	TAL PEN
Total/NA	Prep	3520C			1044.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 22:16	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1044.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 14:54	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1052.4 mL	1 mL	475158	01/23/20 10:36	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			476094	01/30/20 17:31	VC1	TAL PEN
Total/NA	Prep	3520C			1044.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 23:59	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 01:49	DS	TAL PEN

Client Sample ID: P57-ROX-010920

Lab Sample ID: 400-182356-11
Matrix: Water

Date Collected: 01/09/20 10:15
Date Received: 01/10/20 09:01

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	474225	01/16/20 16:23	AMB	TAL PEN
Total/NA	Prep	3520C			1045.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 22:37	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1045.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 15:15	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1055.2 mL	1 mL	475158	01/23/20 10:36	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			475877	01/29/20 22:21	VC1	TAL PEN
Total/NA	Prep	3520C			1045.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 15:47	KJA	TAL PEN
Total/NA	Prep	8011			32.5 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 16:30	KLR	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: T12-ROX-010920

Lab Sample ID: 400-182356-12

Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

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	474225	01/16/20 17:20	AMB	TAL PEN
Total/NA	Prep	3520C			1045 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 22:58	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1045 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 15:36	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1055 mL	1 mL	475158	01/23/20 10:36	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			475877	01/29/20 22:42	VC1	TAL PEN
Total/NA	Prep	3520C			1045 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 16:06	KJA	TAL PEN
Total/NA	Prep	3520C	DL		1045 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			475004	01/22/20 17:22	PP1	TAL PEN
Total/NA	Prep	8011			30.8 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 16:50	KLR	TAL PEN

Client Sample ID: T12-ROX-010920-DUP

Lab Sample ID: 400-182356-13

Date Collected: 01/09/20 11:05
Date Received: 01/10/20 09:01

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	474225	01/16/20 17:48	AMB	TAL PEN
Total/NA	Prep	3520C			1040.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 23:20	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1040.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 15:57	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1054.4 mL	1 mL	475158	01/23/20 10:36	JRW	TAL PEN
Total/NA	Analysis	8270D	RE	1			475877	01/29/20 23:03	VC1	TAL PEN
Total/NA	Prep	3520C			1040.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 16:24	KJA	TAL PEN
Total/NA	Prep	3520C	DL		1040.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			475004	01/22/20 17:40	PP1	TAL PEN
Total/NA	Prep	8011			34.2 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 17:11	KLR	TAL PEN

Client Sample ID: P93A-ROX-010920

Lab Sample ID: 400-182356-14

Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	474225	01/16/20 18:16	AMB	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 23:41	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1044.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 16:19	VC1	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 16:42	KJA	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: P93A-ROX-010920

Lab Sample ID: 400-182356-14
Matrix: Water

Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

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	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 17:31	KLR	TAL PEN

Client Sample ID: P93A-ROX-010920-DUP

Lab Sample ID: 400-182356-15
Matrix: Water

Date Collected: 01/09/20 11:55
Date Received: 01/10/20 09:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	474225	01/16/20 18:44	AMB	TAL PEN
Total/NA	Prep	3520C			1043.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/22/20 00:02	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1043.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 16:40	VC1	TAL PEN
Total/NA	Prep	3520C			1043.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 17:01	KJA	TAL PEN
Total/NA	Prep	8011			33.9 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 17:52	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473741/1-A
Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 11:20	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-473981/4
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	Analysis	8260B		1	5 mL	5 mL	473981	01/14/20 15:05	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-474202/1-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 18:21	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1000 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 12:46	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 21:15	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-474225/4
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	474225	01/16/20 10:14	AMB	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-474984/1-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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 19:14	DS	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-475158/1-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	475158	01/23/20 10:31	JRW	TAL PEN
Total/NA	Analysis	8270D		1			475930	01/29/20 19:56	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-473741/2-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	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 11:41	KLR	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-473981/1002
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	473981	01/14/20 14:03	RS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-474202/2-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 18:43	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474711	01/20/20 21:33	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-474202/3-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 19:04	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-474225/1002

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	474225	01/16/20 09:01	AMB	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-474984/2-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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 19:34	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-475158/2-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	475158	01/23/20 10:31	JRW	TAL PEN
Total/NA	Analysis	8270D		1			475930	01/29/20 20:21	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-473741/3-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	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 12:02	KLR	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-474202/4-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 19:25	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-182356-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-474984/3-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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 19:54	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-475158/3-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	475158	01/23/20 10:31	JRW	TAL PEN
Total/NA	Analysis	8270D		1			475930	01/29/20 20:45	VC1	TAL PEN

Client Sample ID: MW16-ROX-010920

Lab Sample ID: 400-182356-3 MS

Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

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	473981	01/14/20 16:02	RS	TAL PEN
Total/NA	Prep	3520C			1042.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 20:08	VC1	TAL PEN
Total/NA	Prep	3520C			1042.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474711	01/20/20 22:09	PP1	TAL PEN
Total/NA	Prep	8011			32.5 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 18:53	KLR	TAL PEN

Client Sample ID: MW16-ROX-010920

Lab Sample ID: 400-182356-3 MSD

Date Collected: 01/09/20 09:10
Date Received: 01/10/20 09:01

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	473981	01/14/20 16:30	RS	TAL PEN
Total/NA	Prep	3520C			1042.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 20:29	VC1	TAL PEN
Total/NA	Prep	3520C			1042.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474711	01/20/20 22:28	PP1	TAL PEN
Total/NA	Prep	8011			31.9 mL	35 mL	473741	01/13/20 08:57	TMB	TAL PEN
Total/NA	Analysis	8011		1			473858	01/14/20 19:14	KLR	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: 400-182356-1

GC/MS VOA

Analysis Batch: 473981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-1	TB-ROX-010920-8260-A	Total/NA	Water	8260B	
400-182356-3	MW16-ROX-010920	Total/NA	Water	8260B	
MB 400-473981/4	Method Blank	Total/NA	Water	8260B	
LCS 400-473981/1002	Lab Control Sample	Total/NA	Water	8260B	
400-182356-3 MS	MW16-ROX-010920	Total/NA	Water	8260B	
400-182356-3 MSD	MW16-ROX-010920	Total/NA	Water	8260B	

Analysis Batch: 474225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-4	ROST3MW-ROX-010920	Total/NA	Water	8260B	
400-182356-5	MW26-ROX-010920	Total/NA	Water	8260B	
400-182356-6	MW1-ROX-010920	Total/NA	Water	8260B	
400-182356-7	MW2-ROX-010920	Total/NA	Water	8260B	
400-182356-8	TB-ROX-010920-8260-B	Total/NA	Water	8260B	
400-182356-10	P59-ROX-010920	Total/NA	Water	8260B	
400-182356-11	P57-ROX-010920	Total/NA	Water	8260B	
400-182356-12	T12-ROX-010920	Total/NA	Water	8260B	
400-182356-13	T12-ROX-010920-DUP	Total/NA	Water	8260B	
400-182356-14	P93A-ROX-010920	Total/NA	Water	8260B	
400-182356-15	P93A-ROX-010920-DUP	Total/NA	Water	8260B	
MB 400-474225/4	Method Blank	Total/NA	Water	8260B	
LCS 400-474225/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 474202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-3 - RA	MW16-ROX-010920	Total/NA	Water	3520C	
400-182356-3	MW16-ROX-010920	Total/NA	Water	3520C	
400-182356-4	ROST3MW-ROX-010920	Total/NA	Water	3520C	
400-182356-4 - RA	ROST3MW-ROX-010920	Total/NA	Water	3520C	
400-182356-5	MW26-ROX-010920	Total/NA	Water	3520C	
400-182356-5 - RA	MW26-ROX-010920	Total/NA	Water	3520C	
400-182356-6	MW1-ROX-010920	Total/NA	Water	3520C	
400-182356-6 - RA	MW1-ROX-010920	Total/NA	Water	3520C	
400-182356-7	MW2-ROX-010920	Total/NA	Water	3520C	
400-182356-7 - RA	MW2-ROX-010920	Total/NA	Water	3520C	
400-182356-10	P59-ROX-010920	Total/NA	Water	3520C	
400-182356-10 - RA	P59-ROX-010920	Total/NA	Water	3520C	
400-182356-11	P57-ROX-010920	Total/NA	Water	3520C	
400-182356-11 - RA	P57-ROX-010920	Total/NA	Water	3520C	
400-182356-12 - RA	T12-ROX-010920	Total/NA	Water	3520C	
400-182356-12	T12-ROX-010920	Total/NA	Water	3520C	
400-182356-12 - DL	T12-ROX-010920	Total/NA	Water	3520C	
400-182356-13 - RA	T12-ROX-010920-DUP	Total/NA	Water	3520C	
400-182356-13	T12-ROX-010920-DUP	Total/NA	Water	3520C	
400-182356-13 - DL	T12-ROX-010920-DUP	Total/NA	Water	3520C	
400-182356-14 - RA	P93A-ROX-010920	Total/NA	Water	3520C	
400-182356-14	P93A-ROX-010920	Total/NA	Water	3520C	
400-182356-15 - RA	P93A-ROX-010920-DUP	Total/NA	Water	3520C	
400-182356-15	P93A-ROX-010920-DUP	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 474202 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-474202/1-A	Method Blank	Total/NA	Water	3520C	
MB 400-474202/1-A - RA	Method Blank	Total/NA	Water	3520C	
LCS 400-474202/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-474202/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-474202/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-182356-3 MS	MW16-ROX-010920	Total/NA	Water	3520C	
400-182356-3 MSD	MW16-ROX-010920	Total/NA	Water	3520C	

Analysis Batch: 474711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-3	MW16-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-4	ROST3MW-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-5	MW26-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-6	MW1-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-7	MW2-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-10	P59-ROX-010920	Total/NA	Water	8270D LL	474202
MB 400-474202/1-A	Method Blank	Total/NA	Water	8270D LL	474202
LCS 400-474202/2-A	Lab Control Sample	Total/NA	Water	8270D LL	474202
400-182356-3 MS	MW16-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-3 MSD	MW16-ROX-010920	Total/NA	Water	8270D LL	474202

Analysis Batch: 474834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-11	P57-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-12	T12-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-13	T12-ROX-010920-DUP	Total/NA	Water	8270D LL	474202
400-182356-14	P93A-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-15	P93A-ROX-010920-DUP	Total/NA	Water	8270D LL	474202

Analysis Batch: 474859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-3	MW16-ROX-010920	Total/NA	Water	8270D	474202
400-182356-4	ROST3MW-ROX-010920	Total/NA	Water	8270D	474202
400-182356-5	MW26-ROX-010920	Total/NA	Water	8270D	474202
400-182356-6	MW1-ROX-010920	Total/NA	Water	8270D	474202
400-182356-7	MW2-ROX-010920	Total/NA	Water	8270D	474202
400-182356-10	P59-ROX-010920	Total/NA	Water	8270D	474202
400-182356-11	P57-ROX-010920	Total/NA	Water	8270D	474202
400-182356-12	T12-ROX-010920	Total/NA	Water	8270D	474202
400-182356-13	T12-ROX-010920-DUP	Total/NA	Water	8270D	474202
400-182356-14	P93A-ROX-010920	Total/NA	Water	8270D	474202
400-182356-15	P93A-ROX-010920-DUP	Total/NA	Water	8270D	474202
MB 400-474202/1-A	Method Blank	Total/NA	Water	8270D	474202
LCS 400-474202/2-A	Lab Control Sample	Total/NA	Water	8270D	474202
LCS 400-474202/3-A	Lab Control Sample	Total/NA	Water	8270D	474202
LCSD 400-474202/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	474202
400-182356-3 MS	MW16-ROX-010920	Total/NA	Water	8270D	474202
400-182356-3 MSD	MW16-ROX-010920	Total/NA	Water	8270D	474202

QC Association Summary

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

Job ID: 400-182356-1

GC/MS Semi VOA

Analysis Batch: 474976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-3 - RA	MW16-ROX-010920	Total/NA	Water	8270D	474202
400-182356-5 - RA	MW26-ROX-010920	Total/NA	Water	8270D	474202
400-182356-6 - RA	MW1-ROX-010920	Total/NA	Water	8270D	474202
400-182356-7 - RA	MW2-ROX-010920	Total/NA	Water	8270D	474202
400-182356-10 - RA	P59-ROX-010920	Total/NA	Water	8270D	474202
400-182356-11 - RA	P57-ROX-010920	Total/NA	Water	8270D	474202
400-182356-12 - RA	T12-ROX-010920	Total/NA	Water	8270D	474202
400-182356-13 - RA	T12-ROX-010920-DUP	Total/NA	Water	8270D	474202
400-182356-14 - RA	P93A-ROX-010920	Total/NA	Water	8270D	474202
400-182356-15 - RA	P93A-ROX-010920-DUP	Total/NA	Water	8270D	474202
MB 400-474202/1-A - RA	Method Blank	Total/NA	Water	8270D	474202

Analysis Batch: 475004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-12 - DL	T12-ROX-010920	Total/NA	Water	8270D LL	474202
400-182356-13 - DL	T12-ROX-010920-DUP	Total/NA	Water	8270D LL	474202

Analysis Batch: 475135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-4 - RA	ROST3MW-ROX-010920	Total/NA	Water	8270D	474202

Prep Batch: 475158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-6 - RE	MW1-ROX-010920	Total/NA	Water	3520C	
400-182356-10 - RE	P59-ROX-010920	Total/NA	Water	3520C	
400-182356-11 - RE	P57-ROX-010920	Total/NA	Water	3520C	
400-182356-12 - RE	T12-ROX-010920	Total/NA	Water	3520C	
400-182356-13 - RE	T12-ROX-010920-DUP	Total/NA	Water	3520C	
MB 400-475158/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-475158/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-475158/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 475877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-11 - RE	P57-ROX-010920	Total/NA	Water	8270D	475158
400-182356-12 - RE	T12-ROX-010920	Total/NA	Water	8270D	475158
400-182356-13 - RE	T12-ROX-010920-DUP	Total/NA	Water	8270D	475158

Analysis Batch: 475930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-475158/1-A	Method Blank	Total/NA	Water	8270D	475158
LCS 400-475158/2-A	Lab Control Sample	Total/NA	Water	8270D	475158
LCSD 400-475158/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	475158

Analysis Batch: 476094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-6 - RE	MW1-ROX-010920	Total/NA	Water	8270D	475158
400-182356-10 - RE	P59-ROX-010920	Total/NA	Water	8270D	475158

QC Association Summary

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

Job ID: 400-182356-1

GC Semi VOA

Prep Batch: 473741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-3	MW16-ROX-010920	Total/NA	Water	8011	
400-182356-11	P57-ROX-010920	Total/NA	Water	8011	
400-182356-12	T12-ROX-010920	Total/NA	Water	8011	
400-182356-13	T12-ROX-010920-DUP	Total/NA	Water	8011	
400-182356-14	P93A-ROX-010920	Total/NA	Water	8011	
400-182356-15	P93A-ROX-010920-DUP	Total/NA	Water	8011	
MB 400-473741/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-473741/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-473741/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-182356-3 MS	MW16-ROX-010920	Total/NA	Water	8011	
400-182356-3 MSD	MW16-ROX-010920	Total/NA	Water	8011	

Analysis Batch: 473858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-3	MW16-ROX-010920	Total/NA	Water	8011	473741
400-182356-11	P57-ROX-010920	Total/NA	Water	8011	473741
400-182356-12	T12-ROX-010920	Total/NA	Water	8011	473741
400-182356-13	T12-ROX-010920-DUP	Total/NA	Water	8011	473741
400-182356-14	P93A-ROX-010920	Total/NA	Water	8011	473741
400-182356-15	P93A-ROX-010920-DUP	Total/NA	Water	8011	473741
MB 400-473741/1-A	Method Blank	Total/NA	Water	8011	473741
LCS 400-473741/2-A	Lab Control Sample	Total/NA	Water	8011	473741
LCSD 400-473741/3-A	Lab Control Sample Dup	Total/NA	Water	8011	473741
400-182356-3 MS	MW16-ROX-010920	Total/NA	Water	8011	473741
400-182356-3 MSD	MW16-ROX-010920	Total/NA	Water	8011	473741

Prep Batch: 474984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-2	TB-ROX-010920-8011-A	Total/NA	Water	8011	
400-182356-4	ROST3MW-ROX-010920	Total/NA	Water	8011	
400-182356-5	MW26-ROX-010920	Total/NA	Water	8011	
400-182356-6	MW1-ROX-010920	Total/NA	Water	8011	
400-182356-7	MW2-ROX-010920	Total/NA	Water	8011	
400-182356-9	TB-ROX-010920-8260-B	Total/NA	Water	8011	
400-182356-10	P59-ROX-010920	Total/NA	Water	8011	
MB 400-474984/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-474984/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-474984/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 475080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182356-2	TB-ROX-010920-8011-A	Total/NA	Water	8011	474984
400-182356-4	ROST3MW-ROX-010920	Total/NA	Water	8011	474984
400-182356-5	MW26-ROX-010920	Total/NA	Water	8011	474984
400-182356-6	MW1-ROX-010920	Total/NA	Water	8011	474984
400-182356-7	MW2-ROX-010920	Total/NA	Water	8011	474984
400-182356-9	TB-ROX-010920-8260-B	Total/NA	Water	8011	474984
400-182356-10	P59-ROX-010920	Total/NA	Water	8011	474984
MB 400-474984/1-A	Method Blank	Total/NA	Water	8011	474984
LCS 400-474984/2-A	Lab Control Sample	Total/NA	Water	8011	474984
LCSD 400-474984/3-A	Lab Control Sample Dup	Total/NA	Water	8011	474984

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

Lab Sample ID: MB 400-473981/4
Matrix: Water
Analysis Batch: 473981

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/14/20 15:05	1
Acrolein	ND		20	10	ug/L			01/14/20 15:05	1
Acrylonitrile	ND		10	2.8	ug/L			01/14/20 15:05	1
Benzene	ND		1.0	0.38	ug/L			01/14/20 15:05	1
Bromobenzene	ND		1.0	0.54	ug/L			01/14/20 15:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/14/20 15:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Bromoform	ND		5.0	0.71	ug/L			01/14/20 15:05	1
Bromomethane	ND		1.0	0.98	ug/L			01/14/20 15:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/14/20 15:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Chloroethane	ND		1.0	0.76	ug/L			01/14/20 15:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/14/20 15:05	1
Chloroform	ND		1.0	0.60	ug/L			01/14/20 15:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/14/20 15:05	1
Chloromethane	ND		1.0	0.83	ug/L			01/14/20 15:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/14/20 15:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/14/20 15:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/14/20 15:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/14/20 15:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/14/20 15:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/14/20 15:05	1
2-Hexanone	ND		25	3.1	ug/L			01/14/20 15:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/14/20 15:05	1
Methylene bromide	ND		5.0	0.59	ug/L			01/14/20 15:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/14/20 15:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/14/20 15:05	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/14/20 15:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/14/20 15:05	1
Naphthalene	ND		1.0	1.0	ug/L			01/14/20 15:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/14/20 15:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/14/20 15:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/14/20 15:05	1
o-Xylene	ND		5.0	0.60	ug/L			01/14/20 15:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/14/20 15:05	1

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

Lab Sample ID: MB 400-473981/4
Matrix: Water
Analysis Batch: 473981

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/14/20 15:05	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/14/20 15:05	1
Styrene	ND		1.0	1.0	ug/L			01/14/20 15:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/14/20 15:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/14/20 15:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/14/20 15:05	1
Toluene	ND		1.0	0.41	ug/L			01/14/20 15:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/14/20 15:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/14/20 15:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/14/20 15:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/14/20 15:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/14/20 15:05	1
Trichloroethene	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/14/20 15:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/14/20 15:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/14/20 15:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/14/20 15:05	1
Vinyl acetate	ND		25	2.0	ug/L			01/14/20 15:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/14/20 15:05	1
Xylenes, Total	ND		10	1.6	ug/L			01/14/20 15:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*01/14/20 15:05*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*01/14/20 15:05*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/14/20 15:05*	*1*

Lab Sample ID: LCS 400-473981/1002
Matrix: Water
Analysis Batch: 473981

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	185		ug/L		93	43 - 160
Acrolein	500	706		ug/L		141	38 - 160
Acrylonitrile	500	551		ug/L		110	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	47.7		ug/L		95	70 - 132
Bromochloromethane	50.0	53.3		ug/L		107	70 - 130
Bromodichloromethane	50.0	46.3		ug/L		93	67 - 133
Bromoform	50.0	53.5		ug/L		107	57 - 140
Bromomethane	50.0	41.7		ug/L		83	10 - 160
2-Butanone (MEK)	200	190		ug/L		95	61 - 145
Carbon disulfide	50.0	40.7		ug/L		81	61 - 137
Carbon tetrachloride	50.0	46.7		ug/L		93	61 - 137
Chlorobenzene	50.0	46.9		ug/L		94	70 - 130
Dibromochloromethane	50.0	49.0		ug/L		98	67 - 135
Chloroethane	50.0	40.9		ug/L		82	55 - 141

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

Lab Sample ID: LCS 400-473981/1002
Matrix: Water
Analysis Batch: 473981

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	128	*	ug/L		255	10 - 160
Chloroform	50.0	45.7		ug/L		91	69 - 130
1-Chlorohexane	50.0	57.1		ug/L		114	69 - 130
Chloromethane	50.0	63.1		ug/L		126	58 - 137
cis-1,2-Dichloroethene	50.0	52.5		ug/L		105	68 - 130
cis-1,3-Dichloropropene	50.0	44.0		ug/L		88	69 - 132
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 130
1,4-Dichlorobenzene	50.0	48.7		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	39.0		ug/L		78	41 - 146
1,1-Dichloroethane	50.0	44.2		ug/L		88	70 - 130
1,2-Dichloroethane	50.0	51.8		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	47.3		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	51.4		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	47.2		ug/L		94	70 - 130
2,2-Dichloropropane	50.0	36.3		ug/L		73	52 - 135
1,1-Dichloropropene	50.0	45.2		ug/L		90	70 - 130
Ethylbenzene	50.0	45.3		ug/L		91	70 - 130
Ethyl methacrylate	50.0	46.7		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	52.9		ug/L		106	53 - 140
2-Hexanone	200	248		ug/L		124	65 - 137
Isopropylbenzene	50.0	45.7		ug/L		91	70 - 130
Methylene bromide	50.0	51.3		ug/L		103	70 - 130
Methylene Chloride	50.0	38.7		ug/L		77	66 - 135
4-Methyl-2-pentanone (MIBK)	200	249		ug/L		124	69 - 138
Methyl tert-butyl ether	50.0	36.8		ug/L		74	66 - 130
m-Xylene & p-Xylene	50.0	44.0		ug/L		88	70 - 130
Naphthalene	50.0	47.9		ug/L		96	47 - 149
n-Butylbenzene	50.0	50.0		ug/L		100	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	48.1		ug/L		96	70 - 130
o-Xylene	50.0	44.9		ug/L		90	70 - 130
p-Chlorotoluene	50.0	48.8		ug/L		98	70 - 130
p-Isopropyltoluene	50.0	50.8		ug/L		102	65 - 130
sec-Butylbenzene	50.0	49.5		ug/L		99	66 - 130
Styrene	50.0	45.0		ug/L		90	70 - 130
tert-Butylbenzene	50.0	47.1		ug/L		94	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.9		ug/L		100	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.3		ug/L		105	70 - 131
Tetrachloroethene	50.0	47.9		ug/L		96	65 - 130
Toluene	50.0	44.5		ug/L		89	70 - 130
trans-1,2-Dichloroethene	50.0	40.5		ug/L		81	70 - 130
trans-1,3-Dichloropropene	50.0	41.4		ug/L		83	63 - 130
1,2,3-Trichlorobenzene	50.0	47.2		ug/L		94	60 - 138
1,2,4-Trichlorobenzene	50.0	47.0		ug/L		94	60 - 140
1,1,1-Trichloroethane	50.0	43.2		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	48.2		ug/L		96	70 - 130
Trichloroethene	50.0	49.0		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	52.6		ug/L		105	65 - 138

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

Lab Sample ID: LCS 400-473981/1002
Matrix: Water
Analysis Batch: 473981

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	54.4		ug/L		109	70 - 130
1,2,4-Trimethylbenzene	50.0	49.3		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	50.0	49.0		ug/L		98	69 - 130
Vinyl acetate	100	81.4		ug/L		81	26 - 160
Vinyl chloride	50.0	58.9		ug/L		118	59 - 136
Xylenes, Total	100	88.9		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*104*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 400-182356-3 MS
Matrix: Water
Analysis Batch: 473981

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	165		ug/L		82	43 - 150
Acrolein	ND		500	685		ug/L		137	38 - 150
Acrylonitrile	ND		500	547		ug/L		109	62 - 149
Benzene	ND		50.0	43.6		ug/L		87	56 - 142
Bromobenzene	ND		50.0	43.8		ug/L		88	59 - 136
Bromochloromethane	ND		50.0	51.7		ug/L		103	64 - 140
Bromodichloromethane	ND		50.0	42.4		ug/L		85	59 - 143
Bromoform	ND		50.0	44.8		ug/L		90	50 - 140
Bromomethane	ND		50.0	39.9		ug/L		80	10 - 150
2-Butanone (MEK)	ND		200	185		ug/L		93	55 - 150
Carbon disulfide	ND		50.0	36.6		ug/L		73	48 - 150
Carbon tetrachloride	ND		50.0	43.8		ug/L		88	55 - 145
Chlorobenzene	ND		50.0	44.3		ug/L		89	64 - 130
Dibromochloromethane	ND		50.0	44.0		ug/L		88	56 - 143
Chloroethane	ND		50.0	39.9		ug/L		80	50 - 150
2-Chloroethyl vinyl ether	ND	F1 *	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	43.8		ug/L		88	60 - 141
1-Chlorohexane	ND		50.0	50.8		ug/L		102	56 - 136
Chloromethane	ND		50.0	61.3		ug/L		123	49 - 148
cis-1,2-Dichloroethene	ND		50.0	50.2		ug/L		100	59 - 143
cis-1,3-Dichloropropene	ND		50.0	40.0		ug/L		80	57 - 140
1,2-Dichlorobenzene	ND		50.0	44.1		ug/L		88	52 - 137
1,3-Dichlorobenzene	ND		50.0	42.1		ug/L		84	54 - 135
1,4-Dichlorobenzene	ND		50.0	41.5		ug/L		83	53 - 135
Dichlorodifluoromethane	ND		50.0	28.1		ug/L		56	16 - 150
1,1-Dichloroethane	ND		50.0	42.9		ug/L		86	61 - 144
1,2-Dichloroethane	ND		50.0	49.0		ug/L		98	60 - 141
1,1-Dichloroethene	ND		50.0	47.1		ug/L		94	54 - 147
1,2-Dichloropropane	ND		50.0	49.5		ug/L		99	66 - 137
1,3-Dichloropropane	ND		50.0	45.4		ug/L		91	66 - 133
2,2-Dichloropropane	ND		50.0	33.4		ug/L		67	42 - 144

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

Lab Sample ID: 400-182356-3 MS
Matrix: Water
Analysis Batch: 473981

Client Sample ID: MW16-ROX-010920
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	42.4		ug/L		85	65 - 136
Ethylbenzene	ND		50.0	41.2		ug/L		82	58 - 131
Ethyl methacrylate	ND		50.0	45.1		ug/L		90	64 - 130
Hexachlorobutadiene	ND		50.0	41.5		ug/L		83	31 - 149
2-Hexanone	ND		200	235		ug/L		117	65 - 140
Isopropylbenzene	ND		50.0	40.4		ug/L		81	56 - 133
Methylene bromide	ND		50.0	49.6		ug/L		99	63 - 138
Methylene Chloride	ND		50.0	33.5		ug/L		67	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	239		ug/L		120	63 - 146
Methyl tert-butyl ether	ND		50.0	35.9		ug/L		72	59 - 137
m-Xylene & p-Xylene	ND		50.0	40.4		ug/L		81	57 - 130
Naphthalene	ND		50.0	42.9		ug/L		86	25 - 150
n-Butylbenzene	ND		50.0	40.1		ug/L		80	41 - 142
N-Propylbenzene	ND		50.0	43.1		ug/L		86	51 - 138
o-Chlorotoluene	ND		50.0	41.0		ug/L		82	53 - 134
o-Xylene	ND		50.0	40.7		ug/L		81	61 - 130
p-Chlorotoluene	ND		50.0	41.9		ug/L		84	54 - 133
p-Isopropyltoluene	ND		50.0	41.2		ug/L		82	48 - 139
sec-Butylbenzene	ND		50.0	40.8		ug/L		82	50 - 138
Styrene	ND		50.0	40.3		ug/L		81	58 - 131
tert-Butylbenzene	ND		50.0	39.7		ug/L		79	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	46.1		ug/L		92	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	50.0		ug/L		100	66 - 135
Tetrachloroethene	ND		50.0	39.5		ug/L		79	52 - 133
Toluene	ND		50.0	41.7		ug/L		83	65 - 130
trans-1,2-Dichloroethene	ND		50.0	39.4		ug/L		79	61 - 143
trans-1,3-Dichloropropene	ND		50.0	37.6		ug/L		75	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	40.7		ug/L		81	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	39.4		ug/L		79	39 - 148
1,1,1-Trichloroethane	ND		50.0	40.8		ug/L		82	57 - 142
1,1,2-Trichloroethane	ND		50.0	47.2		ug/L		94	66 - 131
Trichloroethene	ND		50.0	47.0		ug/L		94	64 - 136
Trichlorofluoromethane	ND		50.0	51.0		ug/L		102	54 - 150
1,2,3-Trichloropropane	ND		50.0	50.5		ug/L		101	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	41.9		ug/L		84	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	41.6		ug/L		83	52 - 135
Vinyl acetate	ND		100	84.5		ug/L		85	26 - 150
Vinyl chloride	ND		50.0	43.9		ug/L		88	46 - 150
Xylenes, Total	ND		100	81.1		ug/L		81	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 473981

Client Sample ID: MW16-ROX-010920
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	155		ug/L		77	43 - 150	6	30
Acrolein	ND		500	653		ug/L		131	38 - 150	5	31
Acrylonitrile	ND		500	528		ug/L		106	62 - 149	4	30
Benzene	ND		50.0	43.3		ug/L		87	56 - 142	1	30
Bromobenzene	ND		50.0	43.7		ug/L		87	59 - 136	0	30
Bromochloromethane	ND		50.0	50.1		ug/L		100	64 - 140	3	30
Bromodichloromethane	ND		50.0	42.1		ug/L		84	59 - 143	1	30
Bromoform	ND		50.0	43.2		ug/L		86	50 - 140	4	30
Bromomethane	ND		50.0	40.5		ug/L		81	10 - 150	1	50
2-Butanone (MEK)	ND		200	175		ug/L		88	55 - 150	6	30
Carbon disulfide	ND		50.0	36.3		ug/L		73	48 - 150	1	30
Carbon tetrachloride	ND		50.0	43.6		ug/L		87	55 - 145	0	30
Chlorobenzene	ND		50.0	43.2		ug/L		86	64 - 130	2	30
Dibromochloromethane	ND		50.0	43.0		ug/L		86	56 - 143	2	30
Chloroethane	ND		50.0	42.2		ug/L		84	50 - 150	6	30
2-Chloroethyl vinyl ether	ND	F1 *	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	44.2		ug/L		88	60 - 141	1	30
1-Chlorohexane	ND		50.0	51.0		ug/L		102	56 - 136	0	30
Chloromethane	ND		50.0	61.4		ug/L		123	49 - 148	0	31
cis-1,2-Dichloroethene	ND		50.0	50.6		ug/L		101	59 - 143	1	30
cis-1,3-Dichloropropene	ND		50.0	40.1		ug/L		80	57 - 140	0	30
1,2-Dichlorobenzene	ND		50.0	43.3		ug/L		87	52 - 137	2	30
1,3-Dichlorobenzene	ND		50.0	41.3		ug/L		83	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	41.7		ug/L		83	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	28.0		ug/L		56	16 - 150	0	31
1,1-Dichloroethane	ND		50.0	43.1		ug/L		86	61 - 144	1	30
1,2-Dichloroethane	ND		50.0	49.0		ug/L		98	60 - 141	0	30
1,1-Dichloroethene	ND		50.0	46.9		ug/L		94	54 - 147	0	30
1,2-Dichloropropane	ND		50.0	50.2		ug/L		100	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	44.6		ug/L		89	66 - 133	2	30
2,2-Dichloropropane	ND		50.0	33.8		ug/L		68	42 - 144	1	31
1,1-Dichloropropene	ND		50.0	43.4		ug/L		87	65 - 136	2	30
Ethylbenzene	ND		50.0	41.1		ug/L		82	58 - 131	0	30
Ethyl methacrylate	ND		50.0	43.8		ug/L		88	64 - 130	3	30
Hexachlorobutadiene	ND		50.0	41.3		ug/L		83	31 - 149	0	36
2-Hexanone	ND		200	220		ug/L		110	65 - 140	6	30
Isopropylbenzene	ND		50.0	40.8		ug/L		82	56 - 133	1	30
Methylene bromide	ND		50.0	48.7		ug/L		97	63 - 138	2	30
Methylene Chloride	ND		50.0	38.0		ug/L		76	60 - 146	13	32
4-Methyl-2-pentanone (MIBK)	ND		200	231		ug/L		115	63 - 146	4	30
Methyl tert-butyl ether	ND		50.0	35.7		ug/L		71	59 - 137	0	30
m-Xylene & p-Xylene	ND		50.0	40.2		ug/L		80	57 - 130	0	30
Naphthalene	ND		50.0	44.0		ug/L		88	25 - 150	3	30
n-Butylbenzene	ND		50.0	39.8		ug/L		80	41 - 142	1	31
N-Propylbenzene	ND		50.0	42.8		ug/L		86	51 - 138	1	30
o-Chlorotoluene	ND		50.0	41.4		ug/L		83	53 - 134	1	30
o-Xylene	ND		50.0	40.7		ug/L		81	61 - 130	0	30
p-Chlorotoluene	ND		50.0	41.2		ug/L		82	54 - 133	2	30

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

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 473981

Client Sample ID: MW16-ROX-010920
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	41.1		ug/L		82	48 - 139	0	30
sec-Butylbenzene	ND		50.0	40.8		ug/L		82	50 - 138	0	30
Styrene	ND		50.0	40.8		ug/L		82	58 - 131	1	30
tert-Butylbenzene	ND		50.0	39.4		ug/L		79	54 - 146	1	30
1,1,1,2-Tetrachloroethane	ND		50.0	46.4		ug/L		93	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	48.4		ug/L		97	66 - 135	3	30
Tetrachloroethene	ND		50.0	40.9		ug/L		82	52 - 133	3	30
Toluene	ND		50.0	41.5		ug/L		83	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	38.6		ug/L		77	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	36.9		ug/L		74	53 - 133	2	30
1,2,3-Trichlorobenzene	ND		50.0	41.8		ug/L		84	43 - 145	3	30
1,2,4-Trichlorobenzene	ND		50.0	39.7		ug/L		79	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	41.1		ug/L		82	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	46.3		ug/L		93	66 - 131	2	30
Trichloroethene	ND		50.0	46.6		ug/L		93	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	51.5		ug/L		103	54 - 150	1	30
1,2,3-Trichloropropane	ND		50.0	49.9		ug/L		100	65 - 133	1	30
1,2,4-Trimethylbenzene	ND		50.0	41.7		ug/L		83	50 - 139	1	30
1,3,5-Trimethylbenzene	ND		50.0	41.7		ug/L		83	52 - 135	0	30
Vinyl acetate	ND		100	83.9		ug/L		84	26 - 150	1	33
Vinyl chloride	ND		50.0	46.9		ug/L		94	46 - 150	7	30
Xylenes, Total	ND		100	80.9		ug/L		81	59 - 130	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 400-474225/4
Matrix: Water
Analysis Batch: 474225

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 10:14	1
Acrolein	ND		20	10	ug/L			01/16/20 10:14	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 10:14	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 10:14	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 10:14	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 10:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 10:14	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 10:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 10:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 10:14	1

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

Lab Sample ID: MB 400-474225/4
Matrix: Water
Analysis Batch: 474225

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			01/16/20 10:14	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 10:14	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 10:14	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 10:14	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 10:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 10:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 10:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 10:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 10:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 10:14	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 10:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 10:14	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 10:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 10:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 10:14	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 10:14	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 10:14	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 10:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 10:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 10:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 10:14	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 10:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 10:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 10:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 10:14	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 10:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 10:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 10:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 10:14	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 10:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 10:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 10:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 10:14	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 10:14	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 10:14	1

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

Lab Sample ID: MB 400-474225/4
Matrix: Water
Analysis Batch: 474225

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			01/16/20 10:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 10:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 10:14	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 10:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 10:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*01/16/20 10:14*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*01/16/20 10:14*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/16/20 10:14*	*1*

Lab Sample ID: LCS 400-474225/1002
Matrix: Water
Analysis Batch: 474225

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	234		ug/L		117	43 - 160
Acrolein	500	413		ug/L		83	38 - 160
Acrylonitrile	500	472		ug/L		94	64 - 142
Benzene	50.0	46.1		ug/L		92	70 - 130
Bromobenzene	50.0	47.7		ug/L		95	70 - 132
Bromochloromethane	50.0	38.5		ug/L		77	70 - 130
Bromodichloromethane	50.0	46.0		ug/L		92	67 - 133
Bromoform	50.0	41.7		ug/L		83	57 - 140
Bromomethane	50.0	41.1		ug/L		82	10 - 160
2-Butanone (MEK)	200	185		ug/L		93	61 - 145
Carbon disulfide	50.0	47.9		ug/L		96	61 - 137
Carbon tetrachloride	50.0	43.8		ug/L		88	61 - 137
Chlorobenzene	50.0	46.2		ug/L		92	70 - 130
Dibromochloromethane	50.0	43.8		ug/L		88	67 - 135
Chloroethane	50.0	44.8		ug/L		90	55 - 141
2-Chloroethyl vinyl ether	50.0	41.4		ug/L		83	10 - 160
Chloroform	50.0	41.0		ug/L		82	69 - 130
1-Chlorohexane	50.0	60.1		ug/L		120	69 - 130
Chloromethane	50.0	43.0		ug/L		86	58 - 137
cis-1,2-Dichloroethene	50.0	49.7		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	69 - 132
1,2-Dichlorobenzene	50.0	46.9		ug/L		94	67 - 130
1,3-Dichlorobenzene	50.0	48.6		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	70 - 130
Dichlorodifluoromethane	50.0	42.4		ug/L		85	41 - 146
1,1-Dichloroethane	50.0	47.1		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	51.2		ug/L		102	69 - 130
1,1-Dichloroethene	50.0	42.5		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	49.9		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	46.6		ug/L		93	52 - 135

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

Lab Sample ID: LCS 400-474225/1002
Matrix: Water
Analysis Batch: 474225

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	46.8		ug/L		94	70 - 130
Ethylbenzene	50.0	51.0		ug/L		102	70 - 130
Ethyl methacrylate	50.0	52.5		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	44.4		ug/L		89	53 - 140
2-Hexanone	200	227		ug/L		114	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	46.2		ug/L		92	70 - 130
Methylene Chloride	50.0	45.0		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	48.2		ug/L		96	66 - 130
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	70 - 130
Naphthalene	50.0	48.4		ug/L		97	47 - 149
n-Butylbenzene	50.0	54.6		ug/L		109	67 - 130
N-Propylbenzene	50.0	51.0		ug/L		102	70 - 130
o-Chlorotoluene	50.0	53.2		ug/L		106	70 - 130
o-Xylene	50.0	50.0		ug/L		100	70 - 130
p-Chlorotoluene	50.0	55.5		ug/L		111	70 - 130
p-Isopropyltoluene	50.0	51.8		ug/L		104	65 - 130
sec-Butylbenzene	50.0	53.3		ug/L		107	66 - 130
Styrene	50.0	50.5		ug/L		101	70 - 130
tert-Butylbenzene	50.0	53.7		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/L		95	67 - 131
1,1,2,2-Tetrachloroethane	50.0	54.8		ug/L		110	70 - 131
Tetrachloroethene	50.0	42.5		ug/L		85	65 - 130
Toluene	50.0	50.4		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	43.8		ug/L		88	70 - 130
trans-1,3-Dichloropropene	50.0	51.4		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	45.1		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	45.2		ug/L		90	60 - 140
1,1,1-Trichloroethane	50.0	46.2		ug/L		92	68 - 130
1,1,2-Trichloroethane	50.0	51.2		ug/L		102	70 - 130
Trichloroethene	50.0	43.0		ug/L		86	70 - 130
Trichlorofluoromethane	50.0	45.8		ug/L		92	65 - 138
1,2,3-Trichloropropane	50.0	49.8		ug/L		100	70 - 130
1,2,4-Trimethylbenzene	50.0	51.5		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	52.3		ug/L		105	69 - 130
Vinyl acetate	100	83.8		ug/L		84	26 - 160
Vinyl chloride	50.0	46.0		ug/L		92	59 - 136
Xylenes, Total	100	100		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*109*		*80 - 120*

QC Sample Results

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

Job ID: 400-182356-1

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
Benzenethiol	ND		10	1.7	ug/L		01/15/20 18:07	01/21/20 18:21	1
Benzoic acid	ND		30	7.3	ug/L		01/15/20 18:07	01/21/20 18:21	1
Benzyl alcohol	ND		10	2.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/15/20 18:07	01/21/20 18:21	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/15/20 18:07	01/21/20 18:21	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/15/20 18:07	01/21/20 18:21	1
Bis(2-ethylhexyl) phthalate	16.5		10	5.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/15/20 18:07	01/21/20 18:21	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Chloroaniline	ND		10	3.4	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Chlorophenol	ND		10	2.2	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Dibenzofuran	ND		10	0.52	ug/L		01/15/20 18:07	01/21/20 18:21	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Diethyl phthalate	ND		10	0.70	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/15/20 18:07	01/21/20 18:21	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/15/20 18:07	01/21/20 18:21	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/15/20 18:07	01/21/20 18:21	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/15/20 18:07	01/21/20 18:21	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/15/20 18:07	01/21/20 18:21	1
1,4-Dioxane	ND		10	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/15/20 18:07	01/21/20 18:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/15/20 18:07	01/21/20 18:21	1
Hexachloroethane	ND		10	4.2	ug/L		01/15/20 18:07	01/21/20 18:21	1
Indene	ND		10	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Isophorone	ND		10	0.57	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Methylphenol	ND		10	1.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Nitroaniline	ND		10	2.2	ug/L		01/15/20 18:07	01/21/20 18:21	1
3-Nitroaniline	ND		10	1.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Nitroaniline	ND		10	2.5	ug/L		01/15/20 18:07	01/21/20 18:21	1
Nitrobenzene	ND		10	0.55	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Nitrophenol	ND		10	0.65	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Nitrophenol	ND		10	2.1	ug/L		01/15/20 18:07	01/21/20 18:21	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/15/20 18:07	01/21/20 18:21	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/15/20 18:07	01/21/20 18:21	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/15/20 18:07	01/21/20 18:21	1
Pentachlorophenol	ND		20	1.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
Phenol	ND		10	2.6	ug/L		01/15/20 18:07	01/21/20 18:21	1
Pyridine	ND		10	3.2	ug/L		01/15/20 18:07	01/21/20 18:21	1

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Quinoline	ND		10	6.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/20 18:07	01/21/20 18:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*34 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
2-Fluorophenol	*40*		*10 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
Phenol-d5	*62*		*10 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
Terphenyl-d14	*83*		*53 - 125*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*01/15/20 18:07*	*01/21/20 18:21*	*1*

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	25.7		ug/L		86	29 - 120
Benzoic acid	117	68.0		ug/L		58	10 - 150
Benzyl alcohol	30.0	26.2		ug/L		87	19 - 125
Bis(2-chloroethoxy)methane	30.0	25.6		ug/L		85	45 - 120
Bis(2-chloroethyl)ether	30.0	25.3		ug/L		84	48 - 120
bis (2-chloroisopropyl) ether	30.0	26.3		ug/L		88	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	34.0		ug/L		113	48 - 150
4-Bromophenyl phenyl ether	30.0	25.6		ug/L		85	55 - 122
Butyl benzyl phthalate	30.0	32.6		ug/L		109	46 - 145
4-Chloroaniline	30.0	21.1		ug/L		70	30 - 120
4-Chloro-3-methylphenol	30.0	25.9		ug/L		86	39 - 140
2-Chloronaphthalene	30.0	26.8		ug/L		89	52 - 120
2-Chlorophenol	30.0	22.4		ug/L		75	34 - 120
4-Chlorophenyl phenyl ether	30.0	28.6		ug/L		95	58 - 124
Dibenz[a,h]acridine	30.0	22.0		ug/L		73	46 - 149
Dibenzofuran	30.0	29.0		ug/L		97	58 - 123
3,3'-Dichlorobenzidine	40.0	40.5		ug/L		101	39 - 135
2,4-Dichlorophenol	30.0	24.3		ug/L		81	39 - 128
Diethyl phthalate	30.0	30.9		ug/L		103	44 - 146
2,4-Dimethylphenol	30.0	25.9		ug/L		86	44 - 120
Dimethyl phthalate	30.0	29.2		ug/L		97	50 - 131
Di-n-butyl phthalate	30.0	34.7		ug/L		116	55 - 131
4,6-Dinitro-ortho-cresol	60.0	40.8		ug/L		68	10 - 150
2,4-Dinitrophenol	60.0	37.2		ug/L		62	10 - 150
2,4-Dinitrotoluene	30.0	29.8		ug/L		99	58 - 140
2,6-Dinitrotoluene	30.0	29.1		ug/L		97	57 - 130
Di-n-octyl phthalate	30.0	32.2		ug/L		107	50 - 150
1,4-Dioxane	30.0	22.2		ug/L		74	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	27.0		ug/L		90	47 - 123
Hexachlorobenzene	30.0	28.5		ug/L		95	52 - 131
Hexachlorocyclopentadiene	30.0	10.3	J	ug/L		34	10 - 129

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

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	30.0	18.0		ug/L		60	20 - 120
Indene	30.0	21.9		ug/L		73	47 - 120
Isophorone	30.0	25.9		ug/L		86	49 - 120
2-Methylphenol	30.0	24.8		ug/L		83	39 - 123
3 & 4 Methylphenol	30.0	25.5		ug/L		85	38 - 121
2-Nitroaniline	30.0	31.9		ug/L		106	47 - 150
3-Nitroaniline	30.0	30.5		ug/L		102	34 - 132
4-Nitroaniline	30.0	36.7		ug/L		122	41 - 135
Nitrobenzene	30.0	24.9		ug/L		83	47 - 120
2-Nitrophenol	30.0	24.3		ug/L		81	28 - 136
4-Nitrophenol	60.0	57.2		ug/L		95	10 - 150
N-Nitrosodimethylamine	30.0	25.1		ug/L		84	22 - 148
N-Nitrosodi-n-propylamine	30.0	25.7		ug/L		86	44 - 120
N-Nitrosodiphenylamine	29.8	25.3		ug/L		85	56 - 120
Pentachlorophenol	60.0	45.1		ug/L		75	15 - 141
Phenol	30.0	23.4		ug/L		78	33 - 120
Pyridine	60.0	44.6		ug/L		74	26 - 120
Quinoline	30.0	27.5		ug/L		92	51 - 129
2,4,5-Trichlorophenol	30.0	27.5		ug/L		92	38 - 147
2,4,6-Trichlorophenol	30.0	27.4		ug/L		91	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*34 - 120*
2-Fluorophenol	*64*		*10 - 120*
Nitrobenzene-d5	*87*		*27 - 120*
Phenol-d5	*80*		*10 - 120*
Terphenyl-d14	*105*		*53 - 125*
2,4,6-Tribromophenol	*102*		*15 - 135*

Lab Sample ID: LCS 400-474202/3-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

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	*78*		*34 - 120*
2-Fluorophenol	*55*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*66*		*10 - 120*
Terphenyl-d14	*101*		*53 - 125*
2,4,6-Tribromophenol	*55*		*15 - 135*

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

Lab Sample ID: LCSD 400-474202/4-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*34 - 120*
2-Fluorophenol	*73*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*81*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*68*		*15 - 135*

Lab Sample ID: 400-182356-3 MS
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		28.8	17.5		ug/L		61	10 - 143
Benzoic acid	ND	F1	112	ND	F1	ug/L		0	10 - 134
Benzyl alcohol	ND		28.8	23.4		ug/L		81	10 - 154
Bis(2-chloroethoxy)methane	ND		28.8	23.1		ug/L		80	14 - 147
Bis(2-chloroethyl)ether	ND		28.8	21.3		ug/L		74	28 - 130
bis (2-chloroisopropyl) ether	ND		28.8	24.0		ug/L		83	10 - 141
Bis(2-ethylhexyl) phthalate	ND		28.8	30.7		ug/L		107	43 - 160
4-Bromophenyl phenyl ether	ND		28.8	23.0		ug/L		80	26 - 159
Butyl benzyl phthalate	ND		28.8	30.5		ug/L		106	43 - 151
4-Chloroaniline	ND		28.8	17.0		ug/L		59	10 - 152
4-Chloro-3-methylphenol	ND	F2	28.8	19.5		ug/L		68	17 - 156
2-Chloronaphthalene	ND		28.8	25.4		ug/L		88	10 - 155
2-Chlorophenol	ND	F2	28.8	16.6		ug/L		58	19 - 130
4-Chlorophenyl phenyl ether	ND		28.8	26.1		ug/L		91	25 - 161
Dibenz[a,h]acridine	ND		28.8	21.9		ug/L		76	42 - 147
Dibenzofuran	ND		28.8	26.6		ug/L		92	18 - 157
3,3'-Dichlorobenzidine	ND		38.4	15.4		ug/L		40	10 - 172
2,4-Dichlorophenol	ND	F2	28.8	17.2		ug/L		60	16 - 147
Diethyl phthalate	ND		28.8	27.6		ug/L		96	23 - 160
2,4-Dimethylphenol	ND		28.8	17.1		ug/L		59	25 - 146
Dimethyl phthalate	ND		28.8	26.7		ug/L		93	11 - 158
Di-n-butyl phthalate	ND		28.8	30.5		ug/L		106	28 - 162
4,6-Dinitro-ortho-cresol	ND	F1	57.6	23.1		ug/L		40	10 - 168
2,4-Dinitrophenol	ND	F1	57.6	12.3	J	ug/L		21	10 - 166
2,4-Dinitrotoluene	ND		28.8	26.9		ug/L		94	26 - 158
2,6-Dinitrotoluene	ND		28.8	26.6		ug/L		92	19 - 157
Di-n-octyl phthalate	ND		28.8	29.0		ug/L		101	42 - 150
1,4-Dioxane	ND		28.8	18.8		ug/L		65	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.8	24.7		ug/L		86	19 - 162
Hexachlorobenzene	ND		28.8	25.4		ug/L		88	45 - 145
Hexachlorocyclopentadiene	ND	F1	28.8	6.11	J	ug/L		21	10 - 151
Hexachloroethane	ND		28.8	19.9		ug/L		69	29 - 130

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

Lab Sample ID: 400-182356-3 MS
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	ND		28.8	20.2		ug/L		70	22 - 130
Isophorone	ND		28.8	23.7		ug/L		82	24 - 144
2-Methylphenol	ND		28.8	18.7		ug/L		65	22 - 130
3 & 4 Methylphenol	ND		28.8	19.0		ug/L		66	31 - 130
2-Nitroaniline	ND		28.8	26.8		ug/L		93	10 - 162
3-Nitroaniline	ND		28.8	25.0		ug/L		87	10 - 163
4-Nitroaniline	ND		28.8	27.8		ug/L		97	10 - 162
Nitrobenzene	ND		28.8	25.8		ug/L		90	34 - 135
2-Nitrophenol	ND	F2	28.8	16.8		ug/L		58	27 - 134
4-Nitrophenol	ND	F2 F1	57.6	28.0		ug/L		49	10 - 175
N-Nitrosodimethylamine	ND		28.8	22.6		ug/L		79	10 - 139
N-Nitrosodi-n-propylamine	ND		28.8	23.7		ug/L		82	13 - 147
N-Nitrosodiphenylamine	ND	F1 F2	28.5	8.47	J F1	ug/L		30	31 - 150
Pentachlorophenol	ND	F2	57.6	26.4		ug/L		46	10 - 180
Phenol	ND		28.8	17.9		ug/L		62	23 - 130
Pyridine	ND		57.6	40.0		ug/L		69	10 - 130
Quinoline	ND		28.8	25.5		ug/L		89	10 - 180
2,4,5-Trichlorophenol	ND		28.8	19.1		ug/L		67	43 - 137
2,4,6-Trichlorophenol	ND		28.8	18.1		ug/L		63	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*34 - 120*
2-Fluorophenol	*53*		*10 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Phenol-d5	*61*		*10 - 120*
Terphenyl-d14	*97*		*53 - 125*
2,4,6-Tribromophenol	*73*		*15 - 135*

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		28.8	18.7		ug/L		65	10 - 143	7	63
Benzoic acid	ND	F1	112	ND	F1	ug/L		0	10 - 134	NC	49
Benzyl alcohol	ND		28.8	24.2		ug/L		84	10 - 154	3	37
Bis(2-chloroethoxy)methane	ND		28.8	23.5		ug/L		82	14 - 147	2	70
Bis(2-chloroethyl)ether	ND		28.8	23.2		ug/L		81	28 - 130	9	42
bis (2-chloroisopropyl) ether	ND		28.8	24.3		ug/L		85	10 - 141	1	41
Bis(2-ethylhexyl) phthalate	ND		28.8	32.4		ug/L		112	43 - 160	5	35
4-Bromophenyl phenyl ether	ND		28.8	25.4		ug/L		88	26 - 159	10	30
Butyl benzyl phthalate	ND		28.8	31.6		ug/L		110	43 - 151	3	32
4-Chloroaniline	ND		28.8	19.1		ug/L		67	10 - 152	12	94
4-Chloro-3-methylphenol	ND	F2	28.8	12.9	F2	ug/L		45	17 - 156	41	40
2-Chloronaphthalene	ND		28.8	26.2		ug/L		91	10 - 155	3	29
2-Chlorophenol	ND	F2	28.8	9.81	F2	ug/L		34	19 - 130	51	42
4-Chlorophenyl phenyl ether	ND		28.8	28.1		ug/L		98	25 - 161	7	27
Dibenz[a,h]acridine	ND		28.8	21.9		ug/L		76	42 - 147	0	40

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

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenzofuran	ND		28.8	28.4		ug/L		99	18 - 157	6	29
3,3'-Dichlorobenzidine	ND		38.4	16.1		ug/L		42	10 - 172	4	58
2,4-Dichlorophenol	ND	F2	28.8	10.8	F2	ug/L		37	16 - 147	46	43
Diethyl phthalate	ND		28.8	30.5		ug/L		106	23 - 160	10	40
2,4-Dimethylphenol	ND		28.8	19.9		ug/L		69	25 - 146	15	47
Dimethyl phthalate	ND		28.8	28.7		ug/L		100	11 - 158	8	36
Di-n-butyl phthalate	ND		28.8	33.6		ug/L		117	28 - 162	10	32
4,6-Dinitro-ortho-cresol	ND	F1	57.5	ND	F1	ug/L		0	10 - 168	NC	42
2,4-Dinitrophenol	ND	F1	57.5	ND	F1	ug/L		0	10 - 166	NC	36
2,4-Dinitrotoluene	ND		28.8	28.0		ug/L		97	26 - 158	4	28
2,6-Dinitrotoluene	ND		28.8	28.4		ug/L		99	19 - 157	7	28
Di-n-octyl phthalate	ND		28.8	31.5		ug/L		110	42 - 150	8	35
1,4-Dioxane	ND		28.8	19.5		ug/L		68	10 - 130	4	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.8	26.7		ug/L		93	19 - 162	8	40
Hexachlorobenzene	ND		28.8	28.1		ug/L		98	45 - 145	10	33
Hexachlorocyclopentadiene	ND	F1	28.8	ND	F1	ug/L		0	10 - 151	NC	50
Hexachloroethane	ND		28.8	18.8		ug/L		65	29 - 130	6	41
Indene	ND		28.8	20.2		ug/L		70	22 - 130	0	40
Isophorone	ND		28.8	24.1		ug/L		84	24 - 144	2	33
2-Methylphenol	ND		28.8	21.6		ug/L		75	22 - 130	15	47
3 & 4 Methylphenol	ND		28.8	20.1		ug/L		70	31 - 130	6	47
2-Nitroaniline	ND		28.8	25.5		ug/L		89	10 - 162	5	33
3-Nitroaniline	ND		28.8	27.6		ug/L		96	10 - 163	10	39
4-Nitroaniline	ND		28.8	27.1		ug/L		94	10 - 162	3	50
Nitrobenzene	ND		28.8	29.5		ug/L		103	34 - 135	13	35
2-Nitrophenol	ND	F2	28.8	9.44	J F2	ug/L		33	27 - 134	56	43
4-Nitrophenol	ND	F2 F1	57.5	3.39	J F1 F2	ug/L		6	10 - 175	157	82
N-Nitrosodimethylamine	ND		28.8	23.1		ug/L		80	10 - 139	2	62
N-Nitrosodi-n-propylamine	ND		28.8	23.9		ug/L		83	13 - 147	1	36
N-Nitrosodiphenylamine	ND	F1 F2	28.5	14.0	F2	ug/L		49	31 - 150	49	34
Pentachlorophenol	ND	F2	57.5	5.61	J F2	ug/L		10	10 - 180	130	42
Phenol	ND		28.8	12.7		ug/L		44	23 - 130	34	52
Pyridine	ND		57.5	36.7		ug/L		64	10 - 130	8	55
Quinoline	ND		28.8	24.5		ug/L		85	10 - 180	4	40
2,4,5-Trichlorophenol	ND		28.8	13.9		ug/L		48	43 - 137	32	42
2,4,6-Trichlorophenol	ND		28.8	15.9		ug/L		55	42 - 135	13	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*34 - 120*
2-Fluorophenol	*22*		*10 - 120*
Nitrobenzene-d5	*84*		*27 - 120*
Phenol-d5	*43*		*10 - 120*
Terphenyl-d14	*100*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

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

Lab Sample ID: MB 400-475158/1-A
Matrix: Water
Analysis Batch: 475930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/23/20 10:31	01/29/20 19:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*34 - 120*	*01/23/20 10:31*	*01/29/20 19:56*	*1*
2-Fluorophenol	*53*		*10 - 120*	*01/23/20 10:31*	*01/29/20 19:56*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*01/23/20 10:31*	*01/29/20 19:56*	*1*
Phenol-d5	*70*		*10 - 120*	*01/23/20 10:31*	*01/29/20 19:56*	*1*
Terphenyl-d14	*99*		*53 - 125*	*01/23/20 10:31*	*01/29/20 19:56*	*1*
2,4,6-Tribromophenol	*93*		*15 - 135*	*01/23/20 10:31*	*01/29/20 19:56*	*1*

Lab Sample ID: LCS 400-475158/2-A
Matrix: Water
Analysis Batch: 475930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475158

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	30.0	23.3		ug/L		78	48 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*34 - 120*
2-Fluorophenol	*11*		*10 - 120*
Nitrobenzene-d5	*73*		*27 - 120*
Phenol-d5	*2*	*X*	*10 - 120*
Terphenyl-d14	*79*		*53 - 125*
2,4,6-Tribromophenol	*34*		*15 - 135*

Lab Sample ID: LCSD 400-475158/3-A
Matrix: Water
Analysis Batch: 475930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 475158

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	30.0	41.0	*	ug/L		137	48 - 150	55	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*34 - 120*
2-Fluorophenol	*42*		*10 - 120*
Nitrobenzene-d5	*94*		*27 - 120*
Phenol-d5	*77*		*10 - 120*
Terphenyl-d14	*97*		*53 - 125*
2,4,6-Tribromophenol	*115*		*15 - 135*

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine - RA	ND		10	3.0	ug/L		01/15/20 18:07	01/22/20 12:46	1

QC Sample Results

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

Job ID: 400-182356-1

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474711

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
Acenaphthylene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
Anthracene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Chrysene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Fluoranthene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
Fluorene	ND		0.20	0.021	ug/L		01/15/20 18:07	01/20/20 21:15	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
Phenanthrene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
Pyrene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		01/15/20 18:07	01/20/20 21:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*33 - 138*	*01/15/20 18:07*	*01/20/20 21:15*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*01/15/20 18:07*	*01/20/20 21:15*	*1*
Nitrobenzene-d5	*66*		*19 - 130*	*01/15/20 18:07*	*01/20/20 21:15*	*1*

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	26.0		ug/L		87	41 - 120
Acenaphthylene	30.0	24.7		ug/L		82	44 - 120
Anthracene	30.0	23.5		ug/L		78	49 - 120
Benzo[a]anthracene	30.0	25.2		ug/L		84	61 - 135
Benzo[a]pyrene	30.0	23.5		ug/L		78	52 - 120
Benzo[b]fluoranthene	30.0	29.4		ug/L		98	53 - 134
Benzo[g,h,i]perylene	30.0	19.4		ug/L		65	47 - 133
Benzo[k]fluoranthene	30.0	27.7		ug/L		92	57 - 134
Chrysene	30.0	25.9		ug/L		86	55 - 122
Dibenz(a,h)anthracene	30.0	22.1		ug/L		74	48 - 146
Fluoranthene	30.0	23.7		ug/L		79	54 - 128
Fluorene	30.0	26.2		ug/L		87	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.6		ug/L		75	43 - 142
Phenanthrene	30.0	24.3		ug/L		81	48 - 120
Pyrene	30.0	25.5		ug/L		85	48 - 132
1-Methylnaphthalene	30.0	24.4		ug/L		81	41 - 120
2-Methylnaphthalene	30.0	22.5		ug/L		75	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*101*		*33 - 138*

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

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	77		15 - 122
Nitrobenzene-d5	74		19 - 130

Lab Sample ID: 400-182356-3 MS
Matrix: Water
Analysis Batch: 474711

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		28.8	20.8		ug/L		72	35 - 113
Acenaphthylene	ND		28.8	19.7		ug/L		68	41 - 118
Anthracene	ND		28.8	17.5		ug/L		61	45 - 122
Benzo[a]anthracene	ND		28.8	20.5		ug/L		71	55 - 133
Benzo[a]pyrene	ND		28.8	18.9		ug/L		66	50 - 108
Benzo[b]fluoranthene	ND		28.8	23.8		ug/L		83	50 - 128
Benzo[g,h,i]perylene	ND		28.8	16.5		ug/L		57	46 - 133
Benzo[k]fluoranthene	ND		28.8	24.6		ug/L		85	52 - 128
Chrysene	ND		28.8	21.4		ug/L		75	52 - 116
Dibenz(a,h)anthracene	ND		28.8	18.5		ug/L		64	52 - 143
Fluoranthene	ND		28.8	20.0		ug/L		70	32 - 150
Fluorene	ND		28.8	21.2		ug/L		74	15 - 150
Indeno[1,2,3-cd]pyrene	ND		28.8	18.3		ug/L		64	41 - 141
Phenanthrene	ND		28.8	20.9		ug/L		72	36 - 125
Pyrene	ND		28.8	22.7		ug/L		79	41 - 127
1-Methylnaphthalene	ND		28.8	19.1		ug/L		67	10 - 150
2-Methylnaphthalene	0.036	J	28.8	18.9		ug/L		66	10 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	96		33 - 138
2-Fluorobiphenyl	76		15 - 122
Nitrobenzene-d5	54		19 - 130

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 474711

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.8	22.6		ug/L		79	35 - 113	8	49
Acenaphthylene	ND		28.8	23.2		ug/L		81	41 - 118	16	48
Anthracene	ND		28.8	20.7		ug/L		72	45 - 122	17	56
Benzo[a]anthracene	ND		28.8	24.2		ug/L		84	55 - 133	17	57
Benzo[a]pyrene	ND		28.8	20.8		ug/L		72	50 - 108	10	59
Benzo[b]fluoranthene	ND		28.8	25.5		ug/L		89	50 - 128	7	62
Benzo[g,h,i]perylene	ND		28.8	18.2		ug/L		63	46 - 133	10	58
Benzo[k]fluoranthene	ND		28.8	27.1		ug/L		94	52 - 128	10	58
Chrysene	ND		28.8	24.3		ug/L		85	52 - 116	13	59
Dibenz(a,h)anthracene	ND		28.8	21.0		ug/L		73	52 - 143	13	60
Fluoranthene	ND		28.8	23.4		ug/L		81	32 - 150	16	59
Fluorene	ND		28.8	22.5		ug/L		78	15 - 150	6	49

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

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 474711

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene	ND		28.8	20.5		ug/L		71	41 - 141	11	58
Phenanthrene	ND		28.8	23.4		ug/L		81	36 - 125	11	69
Pyrene	ND		28.8	26.4		ug/L		92	41 - 127	15	58
1-Methylnaphthalene	ND		28.8	20.1		ug/L		70	10 - 150	5	66
2-Methylnaphthalene	0.036	J	28.8	19.2		ug/L		66	10 - 150	1	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*105*		*33 - 138*
2-Fluorobiphenyl	*73*		*15 - 122*
Nitrobenzene-d5	*59*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-473741/1-A
Matrix: Water
Analysis Batch: 473858

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473741

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		01/13/20 08:57	01/14/20 11:20	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/13/20 08:57	01/14/20 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*	*p*	*51 - 149*	*01/13/20 08:57*	*01/14/20 11:20*	*1*

Lab Sample ID: LCS 400-473741/2-A
Matrix: Water
Analysis Batch: 473858

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473741

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.112	p	ug/L		112	60 - 140
1,2-Dibromoethane	0.100	0.123		ug/L		123	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*128*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-473741/3-A
Matrix: Water
Analysis Batch: 473858

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473741

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.114	*	ug/L		114	60 - 140	41	30
1,2-Dibromoethane	0.100	0.119		ug/L		119	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*119*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-182356-3 MS
Matrix: Water
Analysis Batch: 473858

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 473741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F1 *	0.108	0.150	F1 p	ug/L		139	65 - 135
1,2-Dibromoethane	ND	F1	0.108	0.147	F1	ug/L		136	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*210*	*p X*	*51 - 149*

Lab Sample ID: 400-182356-3 MSD
Matrix: Water
Analysis Batch: 473858

Client Sample ID: MW16-ROX-010920
Prep Type: Total/NA
Prep Batch: 473741

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 *	0.110	0.136	p	ug/L		124	65 - 135	10	20
1,2-Dibromoethane	ND	F1	0.110	0.148		ug/L		135	65 - 135	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*119*	*p*	*51 - 149*

Lab Sample ID: MB 400-474984/1-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474984

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		01/22/20 12:08	01/22/20 19:14	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/22/20 19:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/22/20 12:08*	*01/22/20 19:14*	*1*

Lab Sample ID: LCS 400-474984/2-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.108		ug/L		108	60 - 140
1,2-Dibromoethane	0.101	0.113		ug/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*51 - 149*

Lab Sample ID: LCSD 400-474984/3-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474984

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.111		ug/L		110	60 - 140	2	30
1,2-Dibromoethane	0.101	0.127		ug/L		126	60 - 140	12	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-474984/3-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474984

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	103		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 # 1364586 (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 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/9/2020
PAGE: 1 of 2

SAMPLING COMPANY: AECOM
COC CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project/ Task Number: Roxana Quarterly GW: 60619901 - 1.03.001 / 60619901 - 1.03.0011
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDD 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 Order ID
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): James Ragatz, Ben Bierlein
LAB USE
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

400-182356 COC

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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.001: VOC 8260, SVOC 8270
UNIT COST 60619901 - 1.03.0011: 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-010920-8260-A	1/9/20	0000	Water	2				☑	2	2			
	TB-ROX-010920-8011-A	1/9/20	0000	H2O	2					2			2	
	MW16-ROX-010920	1/9/20	0910	H2O	4			2		6	2	1	2	1
	MW16-ROX-010920-MS	1/9/20	0910	H2O	4			2		6	2	1	2	1
	MW16-ROX-010920-MSD	1/9/20	0910	H2O	4			2		6	2	1	2	1
	ROST3MW-ROX-010920	1/9/20	1015	H2O	4			2		6	2	1	2	1
	MW26-ROX-010920	1/9/20	1110	H2O	4			2		6	2	1	2	1
	MW1-ROX-010920	1/9/20	1200	H2O	4			2		6	2	1	2	1
	MW2-ROX-010920	1/9/20	1310	H2O	4			2		6	2	1	2	1

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Fedex: Same as Page 2	1/9/20	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 14Dec15

Custody seals #: Same as Page 2

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 # 1364569 (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 - 1.03.001 | 60619901 - 1.03.0011

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/9/2020
PAGE: 2 of 2

COMPANY NAME: AECOM
LEGI NUMBER:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL

AECOM Project / Task Number: Roxana Quarterly GW
60619901 - 1.03.001 | 60619901 - 1.03.0011

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

TELEPHONE: 314-429-0100
FAX: 314-429-0462
Add'l Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): Mary DAngelo B. Howell

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ON WEEKEND ☐ RESULTS NEEDED

☐ 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

☑ 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 - 1.03.001: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0011: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-010920-8260B	1/9/20	0000	Water	X					2	X				
	TB-ROX-010920-8011-B		0000		X					2			X		
	P59-ROX-010920		0915		X			X		6	X	X	X	X	
	P57-ROX-010920		1015		X			X		6	X	X	X	X	
	T12-ROX-010920		1105		X			X		6	X	X	X	X	
	T12-ROX-010920-DUP		1105		X			X		6	X	X	X	X	
	P93A-ROX-010920		1155		X			X		6	X	X	X	X	
	P93A-ROX-010920-DUP		1155		X			X		6	X	X	X	X	

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
M DAngelo	Fedex: 1275 8885 6680 / 1275 8885 6668; 1275 8885 6679 / 1275 8885 6657	1/9/2020	1600
Relinquished by: (Signature)	Received by: (Signature) 1275 8885 6646	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

Custody seal #s: 1135117 / 1135116 1135113 / 1135112 1135109 / 1135108
1135115 / 1135114 1135111 / 1135110

Version: 14Dec15

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1/31/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182356-1

Login Number: 182356
List Number: 1
Creator: Conrady, Hank W

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	3.0°C 0.0°C 3.1°C 0.9°C 0.9°C
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: 400-182356-1
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	02-22-20
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	200041	10-09-19 *
Illinois	NELAP	004586	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-20
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
North Carolina (WW/SW)	State	314	12-31-20
North Carolina (WW/SW)	State Program	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-20
Rhode Island	State Program	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P330-18-00148	05-17-21
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182482-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 3/1/2020

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

Sample Identification	Sample Identification
TB-ROX-011020-8260-A	TB-ROX-011020-8011-A
MW3-ROX-011020	MW10-ROX-011020
MW28-ROX-011020	

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, laboratory case narrative indicated bis(2-ethylhexyl) phthalate was re-extracted outside of the extraction holding time criteria. bis(2-Ethylhexyl) phthalate was detected in the method blank. Benzenethiol LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in sample MW28-ROX-011020 and the matrix spike duplicate MW3-ROX-011020 MSD. Several VOC, SVOC, PAH, and VOC by 8011 MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW3-ROX-011020. Several SVOC internal standard recoveries were outside criteria in the initial and continuing calibration verifications. The continuing calibration verification for 4,6-dinitro-2-methylphenol (4,6-dinitro-ortho-cresol) 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?

No, bis(2-ethylhexyl) phthalate was re-extracted 17 days outside of the extraction holding time criteria (7 days) due to results that were not consistent with the historical, and due to known laboratory contamination. Professional judgement was used to qualify as estimated (**UJ**); however, not reject the out of holding time data. Data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-011020-RERA	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-011020-RERA	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
MW28-ROX-011020	SVOCs	bis(2-Ethylhexyl) phthalate	**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
MB 400-474202/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	16.5 µg/L

bis(2-Ethylhexyl) phthalate data is reported from the re-extracted run (RERA) and is previously qualified in Section 3.0 of this review due to holding time criteria. bis(2-Ethylhexyl) phthalate was non-detect in the re-extracted run; therefore, 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 400-474202/3-A/4-A	SVOCs	Benzenethiol	**4/3**	29	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
MW3-ROX-011020	SVOCs	Benzenethiol	**UJ**
MW10-ROX-011020	SVOCs	Benzenethiol	**UJ**
MW28-ROX-011020	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW28-ROX-011020	SVOCs	Terphenyl-d_{14}	**45**	53-125
MW3-ROX-011020 MSD	SVOCs	Terphenyl-d_{14}	**50**	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. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW3-ROX-011020 was spiked and duplicated for Method 8260 VOCs, Method 8011 VOCs, and Method 8270 SVOCs/PAHs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW3-ROX-011020	VOCs	2-Chloroethyl vinyl ether	**0**/**0**	**NC**	10-150/50
MW3-ROX-011020	SVOCs	bis(2-Ethylhexyl) phthalate	67/**42**	32	43-160/35
MW3-ROX-011020	SVOCs	3,3'-Dichlorobenzidine	**0**/15	**NC**	10-172/58
MW3-ROX-011020	SVOCs	Di-n-octyl phthalate	79/55	**37**	42-150/35
MW3-ROX-011020	SVOCs	Hexachlorocyclopentadiene	39/17	**77**	10-151/50
MW3-ROX-011020	PAHs	Benzo[a]anthracene	62/**50**	21	55-133/57
MW3-ROX-011020	PAHs	Benzo[a]pyrene	52/**40**	26	50-108/59
MW3-ROX-011020	PAHs	Benzo[g,h,i]perylene	56/**36**	42	46-133/58
MW3-ROX-011020	PAHs	Benzo[k]fluoranthene	58/**46**	23	52-128/58
MW3-ROX-011020	PAHs	Chrysene	59/**49**	20	52-116/59
MW3-ROX-011020	PAHs	Dibenz(a,h)anthracene	59/**43**	33	52-143/60
MW3-ROX-011020	VOCs by 8011	1,2-Dibromo-3-chloropropane	**286/168**	**50**	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. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-011020	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW3-ROX-011020	PAHs	Benzo[a]anthracene	**UJ**
MW3-ROX-011020	PAHs	Benzo[a]pyrene	**UJ**
MW3-ROX-011020	PAHs	Benzo[g,h,i]perylene	**UJ**
MW3-ROX-011020	PAHs	Benzo[k]fluoranthene	**UJ**
MW3-ROX-011020	PAHs	Chrysene	**UJ**
MW3-ROX-011020	PAHs	Dibenz(a,h)anthracene	**UJ**
MW3-ROX-011020	SVOCs	3,3'-Dichlorobenzidine	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
ICV 400-472769/11	SVOCs	Chrysene-d_{12}	**381274**	417202-1668806
CCV 400-474859/4	SVOCs	Perylene-d_{12}	**723961**	170261-681044

Initial and continuing calibration verifications are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for 4,6-dinitro-2-methylphenol (4,6-dinitro-ortho-cresol) was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-011020	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW10-ROX-011020	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW28-ROX-011020	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

eurofins | Environment Testing TestAmerica

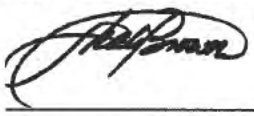
ANALYTICAL REPORT

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

Laboratory Job ID: 400-182482-1
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:
2/11/2020 11:52:34 AM
Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

Designee for

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 3/1/2020
MR

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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: 400-182482-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

CASE NARRATIVE

Client: AECOM Technical Services Inc.

Project: ROXANA QUARTERLY GW

Report Number: 400-182482-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 1/11/2020 8:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.4° C and 1.4° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB-ROX-011020-8260-A (400-182482-1), MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4) and MW28-ROX-011020 (400-182482-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 01/16/2020.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS of sample MW3-ROX-011020MS (400-182482-3) in batch 400-474225. 2-Chloroethyl vinyl ether failed the recovery criteria low for the MSD of sample MW3-ROX-011020MSD (400-182482-3) in batch 400-474225. Refer to the QC report for details. Low recovery may be due to the acidic nature of the sample.
The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-474225 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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-011020-8260-A (400-182482-1), MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4) and MW28-ROX-011020 (400-182482-5). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

1,2-DIBROMOETHANE AND 1,2-DIBROMO-3-CHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples TB-ROX-011020-8011-A (400-182482-2), MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4) and MW28-ROX-011020 (400-182482-5) were analyzed for 1,2-dibromoethane and 1,2-dibromo-3-chloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared on 01/22/2020 and analyzed on 01/23/2020.

1,2-Dibromo-3-Chloropropane failed the recovery criteria high for the MS of sample MW3-ROX-011020MS (400-182482-3) in batch 400-475080.

Job ID: 400-182482-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

1,2-Dibromo-3-Chloropropane failed the recovery criteria high for the MSD of sample MW3-ROX-011020MSD (400-182482-3) in batch 400-475080. 1,2-Dibromo-3-Chloropropane exceeded the RPD limit. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The continuing calibration verification (CCV) associated with batch 400-475080 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 continuing calibration verification (CCV) associated with batch 400-475080 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.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4) and MW28-ROX-011020 (400-182482-5) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 01/15/2020 and analyzed on 01/22/2020.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 400-474202/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. The samples associated with this method blank were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples were not performed. The following samples are impacted: MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4), MW28-ROX-011020 (400-182482-5) and (MB 400-474202/1-A).

Benzenethiol failed the recovery criteria low for LCS 400-474202/3-A. Benzenethiol failed the recovery criteria low for LCSD 400-474202/4-A. 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.

Terphenyl-d14 failed the surrogate recovery criteria low for MW3-ROX-011020MSD (400-182482-3MSD). 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: MW3-ROX-011020 (400-182482-3[MSD]). These results have been reported and qualified.

3,3'-Dichlorobenzidine failed the recovery criteria low for the MS of sample MW3-ROX-011020MS (400-182482-3) in batch 400-474859. Bis(2-ethylhexyl) phthalate failed the recovery criteria low for the MSD of sample MW3-ROX-011020MSD (400-182482-3) in batch 400-474859. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Di-n-octyl phthalate and Hexachlorocyclopentadiene exceeded the RPD limit. 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. Refer to the QC report for details.

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: MW28-ROX-011020 (400-182482-5). These results have been reported and qualified.

The samples were re-extracted and/or re-analyzed outside of holding time for the confirmation of Bis(2-ethylhexyl) phthalate. Both sets of data have been reported. MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4) and MW28-ROX-011020 (400-182482-5)

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 400-474859/2). These results have been reported and qualified.

Job ID: 400-182482-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

The continuing calibration verification (CCV) associated with batch 400-474859 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, Di-n-butyl phthalate and Butyl benzyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 400-474859 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-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.

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

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples MW3-ROX-011020 (400-182482-3), MW10-ROX-011020 (400-182482-4) and MW28-ROX-011020 (400-182482-5) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 01/15/2020 and analyzed on 01/21/2020.

Several analytes failed the recovery criteria low for the MSD of sample MW3-ROX-011020MSD (400-182482-3) in batch 400-474834. 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.

Sample Summary

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

Job ID: 400-182482-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182482-1	TB-ROX-011020-8260-A	Water	01/10/20 00:00	01/11/20 08:35	
400-182482-2	TB-ROX-011020-8011-A	Water	01/10/20 00:00	01/11/20 08:35	
400-182482-3	MW3-ROX-011020	Water	01/10/20 09:00	01/11/20 08:35	
400-182482-4	MW10-ROX-011020	Water	01/10/20 10:05	01/11/20 08:35	
400-182482-5	MW28-ROX-011020	Water	01/10/20 10:55	01/11/20 08:35	

Detection Summary

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

Job ID: 400-182482-1

Client Sample ID: TB-ROX-011020-8260-A

Lab Sample ID: 400-182482-1

No Detections.

Client Sample ID: TB-ROX-011020-8011-A

Lab Sample ID: 400-182482-2

No Detections.

Client Sample ID: MW3-ROX-011020

Lab Sample ID: 400-182482-3

*Do not use this data. Use re-analysis data (RERA)

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	6.0		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	1.9	J	5.0	1.6	ug/L	1		8260B	Total/NA
N-Propylbenzene	11		1.0	0.69	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.64	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	1.0		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	1.9	J	10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.76		0.19	0.071	ug/L	1		8270D LL	Total/NA
~~Bis(2-ethylhexyl) phthalate~~	~~6.8~~	~~J B~~	~~9.5~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~

Client Sample ID: MW10-ROX-011020

Lab Sample ID: 400-182482-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.12	J	0.19	0.058	ug/L	1		8270D LL	Total/NA
~~Bis(2-ethylhexyl) phthalate~~	~~6.3~~	~~J B~~	~~9.7~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~

Client Sample ID: MW28-ROX-011020

Lab Sample ID: 400-182482-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14	J	25	10	ug/L	1		8260B	Total/NA
Benzene	6.7		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.5		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.3		1.0	0.53	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	79		1.0	0.74	ug/L	1		8260B	Total/NA
o-Xylene	4.8	J	5.0	0.60	ug/L	1		8260B	Total/NA
Xylenes, Total	4.8	J	10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.15	J	0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.24		0.19	0.058	ug/L	1		8270D LL	Total/NA
~~Bis(2-ethylhexyl) phthalate~~	~~8.4~~	~~J B~~	~~9.6~~	~~4.8~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~
Bis(2-ethylhexyl) phthalate - RERA	5.1	J H J	9.5	4.8	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: 400-182482-1

Client Sample ID: TB-ROX-011020-8260-A
Date Collected: 01/10/20 00:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 12:35	1
Acrolein	ND		20	10	ug/L			01/16/20 12:35	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 12:35	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 12:35	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 12:35	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 12:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 12:35	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 12:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 12:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 12:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 12:35	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 12:35	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 12:35	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 12:35	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 12:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 12:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 12:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 12:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 12:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 12:35	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 12:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 12:35	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 12:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 12:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 12:35	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 12:35	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 12:35	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 12:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 12:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 12:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 12:35	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 12:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 12:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 12:35	1

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

Job ID: 400-182482-1

Client Sample ID: TB-ROX-011020-8260-A
Date Collected: 01/10/20 00:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 12:35	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 12:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 12:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 12:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 12:35	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 12:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 12:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 12:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 12:35	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 12:35	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 12:35	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 12:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 12:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 12:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 12:35	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 12:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 12:35	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*01/16/20 12:35*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*01/16/20 12:35*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/16/20 12:35*	*1*

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

Job ID: 400-182482-1

Client Sample ID: TB-ROX-011020-8011-A
Date Collected: 01/10/20 00:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-2
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	0.0056	ug/L		01/22/20 12:08	01/23/20 02:29	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		01/22/20 12:08	01/23/20 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*01/22/20 12:08*	*01/23/20 02:29*	*1*

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

Job ID: 400-182482-1

Client Sample ID: MW3-ROX-011020
Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 10:42	1
Acrolein	ND		20	10	ug/L			01/16/20 10:42	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 10:42	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 10:42	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 10:42	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 10:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 10:42	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 10:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 10:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 10:42	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/16/20 10:42	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 10:42	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 10:42	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 10:42	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 10:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 10:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 10:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 10:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 10:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 10:42	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 10:42	1
Isopropylbenzene	6.0		1.0	0.53	ug/L			01/16/20 10:42	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 10:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 10:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 10:42	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 10:42	1
m-Xylene & p-Xylene	1.9	J	5.0	1.6	ug/L			01/16/20 10:42	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 10:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 10:42	1
N-Propylbenzene	11		1.0	0.69	ug/L			01/16/20 10:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 10:42	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 10:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 10:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 10:42	1

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

Job ID: 400-182482-1

Client Sample ID: MW3-ROX-011020
Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 10:42	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 10:42	1
tert-Butylbenzene	0.64	J	1.0	0.63	ug/L			01/16/20 10:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 10:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 10:42	1
Toluene	1.0		1.0	0.41	ug/L			01/16/20 10:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 10:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 10:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 10:42	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:42	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 10:42	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 10:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 10:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 10:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 10:42	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 10:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 10:42	1
Xylenes, Total	1.9	J	10	1.6	ug/L			01/16/20 10:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*01/16/20 10:42*	*1*
Dibromofluoromethane	*90*		*81 - 121*		*01/16/20 10:42*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*01/16/20 10:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/15/20 18:07	01/21/20 17:19	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/15/20 18:07	01/21/20 17:19	1
Anthracene	ND		0.19	0.030	ug/L		01/15/20 18:07	01/21/20 17:19	1
Benzo[a]anthracene	ND	F1	0.19	0.044	ug/L		01/15/20 18:07	01/21/20 17:19	1
Benzo[a]pyrene	ND	F1	0.19	0.040	ug/L		01/15/20 18:07	01/21/20 17:19	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		01/15/20 18:07	01/21/20 17:19	1
Benzo[g,h,i]perylene	ND	F1	0.19	0.12	ug/L		01/15/20 18:07	01/21/20 17:19	1
Benzo[k]fluoranthene	ND	F1	0.19	0.095	ug/L		01/15/20 18:07	01/21/20 17:19	1
Chrysene	ND	F1	0.19	0.071	ug/L		01/15/20 18:07	01/21/20 17:19	1
Dibenz(a,h)anthracene	ND	F1	0.19	0.044	ug/L		01/15/20 18:07	01/21/20 17:19	1
Fluoranthene	ND		0.19	0.065	ug/L		01/15/20 18:07	01/21/20 17:19	1
Fluorene	ND		0.19	0.10	ug/L		01/15/20 18:07	01/21/20 17:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.11	ug/L		01/15/20 18:07	01/21/20 17:19	1
Phenanthrene	ND		0.19	0.034	ug/L		01/15/20 18:07	01/21/20 17:19	1
Pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 17:19	1
1-Methylnaphthalene	0.76		0.19	0.071	ug/L		01/15/20 18:07	01/21/20 17:19	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/15/20 18:07	01/21/20 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*33 - 138*	*01/15/20 18:07*	*01/21/20 17:19*	*1*
2-Fluorobiphenyl	*78*		*15 - 122*	*01/15/20 18:07*	*01/21/20 17:19*	*1*

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

Job ID: 400-182482-1

Client Sample ID: MW3-ROX-011020
Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	65		19 - 130	01/15/20 18:07	01/21/20 17:19	1

* Do not use this data. Use re-analysis data (RERA)

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/15/20 18:07	01/22/20 00:23	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		01/15/20 18:07	01/22/20 00:23	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/22/20 00:23	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/15/20 18:07	01/22/20 00:23	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		01/15/20 18:07	01/22/20 00:23	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		01/15/20 18:07	01/22/20 00:23	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		01/15/20 18:07	01/22/20 00:23	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~6.8~~	~~J B~~	~~9.5~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/22/20 00:23~~	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		01/15/20 18:07	01/22/20 00:23	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		01/15/20 18:07	01/22/20 00:23	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/15/20 18:07	01/22/20 00:23	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/15/20 18:07	01/22/20 00:23	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		01/15/20 18:07	01/22/20 00:23	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/15/20 18:07	01/22/20 00:23	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/15/20 18:07	01/22/20 00:23	1
Dibenzofuran	ND		9.5	0.50	ug/L		01/15/20 18:07	01/22/20 00:23	1
3,3'-Dichlorobenzidine	ND	UJ	9.5	2.5	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/15/20 18:07	01/22/20 00:23	1
Diethyl phthalate	ND		9.5	0.67	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/15/20 18:07	01/22/20 00:23	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		01/15/20 18:07	01/22/20 00:23	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/15/20 18:07	01/22/20 00:23	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.5	1.9	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/15/20 18:07	01/22/20 00:23	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		01/15/20 18:07	01/22/20 00:23	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/15/20 18:07	01/22/20 00:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/15/20 18:07	01/22/20 00:23	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		01/15/20 18:07	01/22/20 00:23	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/22/20 00:23	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/15/20 18:07	01/22/20 00:23	1
Indene	ND		9.5	0.95	ug/L		01/15/20 18:07	01/22/20 00:23	1
Isophorone	ND		9.5	0.54	ug/L		01/15/20 18:07	01/22/20 00:23	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/15/20 18:07	01/22/20 00:23	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/15/20 18:07	01/22/20 00:23	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/15/20 18:07	01/22/20 00:23	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/15/20 18:07	01/22/20 00:23	1
4-Nitroaniline	ND		9.5	2.4	ug/L		01/15/20 18:07	01/22/20 00:23	1
Nitrobenzene	ND		9.5	0.52	ug/L		01/15/20 18:07	01/22/20 00:23	1
2-Nitrophenol	ND		9.5	0.62	ug/L		01/15/20 18:07	01/22/20 00:23	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/15/20 18:07	01/22/20 00:23	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/15/20 18:07	01/22/20 00:23	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/15/20 18:07	01/22/20 00:23	1

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

Job ID: 400-182482-1

Client Sample ID: MW3-ROX-011020
Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		01/15/20 18:07	01/22/20 00:23	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/22/20 00:23	1
Phenol	ND		9.5	2.5	ug/L		01/15/20 18:07	01/22/20 00:23	1
Pyridine	ND		9.5	3.1	ug/L		01/15/20 18:07	01/22/20 00:23	1
Quinoline	ND		9.5	5.7	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/15/20 18:07	01/22/20 00:23	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/15/20 18:07	01/22/20 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*34 - 120*	*01/15/20 18:07*	*01/22/20 00:23*	*1*
2-Fluorophenol	*48*		*10 - 120*	*01/15/20 18:07*	*01/22/20 00:23*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*01/15/20 18:07*	*01/22/20 00:23*	*1*
Phenol-d5	*59*		*10 - 120*	*01/15/20 18:07*	*01/22/20 00:23*	*1*
Terphenyl-d14	*84*		*53 - 125*	*01/15/20 18:07*	*01/22/20 00:23*	*1*
2,4,6-Tribromophenol	*85*		*15 - 135*	*01/15/20 18:07*	*01/22/20 00:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		01/15/20 18:07	01/22/20 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H UJ	9.5	4.7	ug/L		02/03/20 11:34	02/07/20 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*02/03/20 11:34*	*02/07/20 02:01*	*1*
2-Fluorophenol	*57*		*10 - 120*	*02/03/20 11:34*	*02/07/20 02:01*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*02/03/20 11:34*	*02/07/20 02:01*	*1*
Phenol-d5	*65*		*10 - 120*	*02/03/20 11:34*	*02/07/20 02:01*	*1*
Terphenyl-d14	*63*		*53 - 125*	*02/03/20 11:34*	*02/07/20 02:01*	*1*
2,4,6-Tribromophenol	*56*		*15 - 135*	*02/03/20 11:34*	*02/07/20 02:01*	*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	F2 F1	0.030	0.0055	ug/L		01/22/20 12:08	01/23/20 02:48	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/23/20 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/22/20 12:08*	*01/23/20 02:48*	*1*

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

Job ID: 400-182482-1

Client Sample ID: MW10-ROX-011020
Date Collected: 01/10/20 10:05
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 13:32	1
Acrolein	ND		20	10	ug/L			01/16/20 13:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 13:32	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 13:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 13:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 13:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 13:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 13:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 13:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 13:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 13:32	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 13:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 13:32	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 13:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 13:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 13:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 13:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 13:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 13:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 13:32	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 13:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 13:32	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 13:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 13:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 13:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 13:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 13:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 13:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 13:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 13:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 13:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 13:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 13:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 13:32	1

Client Sample ID: MW10-ROX-011020
Date Collected: 01/10/20 10:05
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 13:32	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 13:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 13:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 13:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 13:32	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 13:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 13:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 13:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 13:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 13:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 13:32	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 13:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 13:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 13:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 13:32	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 13:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 13:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*01/16/20 13:32*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*01/16/20 13:32*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*01/16/20 13:32*	*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		01/15/20 18:07	01/21/20 18:15	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/15/20 18:07	01/21/20 18:15	1
Anthracene	ND		0.19	0.030	ug/L		01/15/20 18:07	01/21/20 18:15	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/15/20 18:07	01/21/20 18:15	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		01/15/20 18:07	01/21/20 18:15	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		01/15/20 18:07	01/21/20 18:15	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/15/20 18:07	01/21/20 18:15	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		01/15/20 18:07	01/21/20 18:15	1
Chrysene	ND		0.19	0.071	ug/L		01/15/20 18:07	01/21/20 18:15	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		01/15/20 18:07	01/21/20 18:15	1
Fluoranthene	ND		0.19	0.066	ug/L		01/15/20 18:07	01/21/20 18:15	1
Fluorene	ND		0.19	0.11	ug/L		01/15/20 18:07	01/21/20 18:15	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		01/15/20 18:07	01/21/20 18:15	1
Phenanthrene	ND		0.19	0.035	ug/L		01/15/20 18:07	01/21/20 18:15	1
Pyrene	ND		0.19	0.039	ug/L		01/15/20 18:07	01/21/20 18:15	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/15/20 18:07	01/21/20 18:15	1
2-Methylnaphthalene	0.12	J	0.19	0.058	ug/L		01/15/20 18:07	01/21/20 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*106*		*33 - 138*	*01/15/20 18:07*	*01/21/20 18:15*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*01/15/20 18:07*	*01/21/20 18:15*	*1*

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

Job ID: 400-182482-1

Client Sample ID: MW10-ROX-011020
Date Collected: 01/10/20 10:05
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	58		19 - 130	01/15/20 18:07	01/21/20 18:15	1

* Do not use this data - Use re-analysis data (RERA)

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		01/15/20 18:07	01/22/20 01:27	1
Benzenethiol	ND	* UJ	9.7	1.6	ug/L		01/15/20 18:07	01/22/20 01:27	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/22/20 01:27	1
Benzyl alcohol	ND		9.7	1.9	ug/L		01/15/20 18:07	01/22/20 01:27	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		01/15/20 18:07	01/22/20 01:27	1
Bis(2-chloroethyl)ether	ND		9.7	0.71	ug/L		01/15/20 18:07	01/22/20 01:27	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		01/15/20 18:07	01/22/20 01:27	1
~~Bis(2-ethylhexyl) phthalate~~	~~6.3~~	~~J B~~	~~9.7~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/22/20 01:27~~	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		01/15/20 18:07	01/22/20 01:27	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		01/15/20 18:07	01/22/20 01:27	1
4-Chloroaniline	ND		9.7	3.3	ug/L		01/15/20 18:07	01/22/20 01:27	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		01/15/20 18:07	01/22/20 01:27	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		01/15/20 18:07	01/22/20 01:27	1
2-Chlorophenol	ND		9.7	2.1	ug/L		01/15/20 18:07	01/22/20 01:27	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		01/15/20 18:07	01/22/20 01:27	1
Dibenzofuran	ND		9.7	0.50	ug/L		01/15/20 18:07	01/22/20 01:27	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		01/15/20 18:07	01/22/20 01:27	1
Diethyl phthalate	ND		9.7	0.68	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		01/15/20 18:07	01/22/20 01:27	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		01/15/20 18:07	01/22/20 01:27	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		01/15/20 18:07	01/22/20 01:27	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.7	1.9	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		01/15/20 18:07	01/22/20 01:27	1
Di-n-octyl phthalate	ND		9.7	0.42	ug/L		01/15/20 18:07	01/22/20 01:27	1
1,4-Dioxane	ND		9.7	0.97	ug/L		01/15/20 18:07	01/22/20 01:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		01/15/20 18:07	01/22/20 01:27	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		01/15/20 18:07	01/22/20 01:27	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/22/20 01:27	1
Hexachloroethane	ND		9.7	4.1	ug/L		01/15/20 18:07	01/22/20 01:27	1
Indene	ND		9.7	0.97	ug/L		01/15/20 18:07	01/22/20 01:27	1
Isophorone	ND		9.7	0.55	ug/L		01/15/20 18:07	01/22/20 01:27	1
2-Methylphenol	ND		9.7	1.7	ug/L		01/15/20 18:07	01/22/20 01:27	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/22/20 01:27	1
2-Nitroaniline	ND		9.7	2.1	ug/L		01/15/20 18:07	01/22/20 01:27	1
3-Nitroaniline	ND		9.7	1.7	ug/L		01/15/20 18:07	01/22/20 01:27	1
4-Nitroaniline	ND		9.7	2.4	ug/L		01/15/20 18:07	01/22/20 01:27	1
Nitrobenzene	ND		9.7	0.53	ug/L		01/15/20 18:07	01/22/20 01:27	1
2-Nitrophenol	ND		9.7	0.63	ug/L		01/15/20 18:07	01/22/20 01:27	1
4-Nitrophenol	ND		9.7	2.0	ug/L		01/15/20 18:07	01/22/20 01:27	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		01/15/20 18:07	01/22/20 01:27	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		01/15/20 18:07	01/22/20 01:27	1

Client Sample ID: MW10-ROX-011020
Date Collected: 01/10/20 10:05
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		01/15/20 18:07	01/22/20 01:27	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/22/20 01:27	1
Phenol	ND		9.7	2.5	ug/L		01/15/20 18:07	01/22/20 01:27	1
Pyridine	ND		9.7	3.1	ug/L		01/15/20 18:07	01/22/20 01:27	1
Quinoline	ND		9.7	5.8	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		01/15/20 18:07	01/22/20 01:27	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/15/20 18:07	01/22/20 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*01/15/20 18:07*	*01/22/20 01:27*	*1*
2-Fluorophenol	*43*		*10 - 120*	*01/15/20 18:07*	*01/22/20 01:27*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*01/15/20 18:07*	*01/22/20 01:27*	*1*
Phenol-d5	*55*		*10 - 120*	*01/15/20 18:07*	*01/22/20 01:27*	*1*
Terphenyl-d14	*93*		*53 - 125*	*01/15/20 18:07*	*01/22/20 01:27*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*01/15/20 18:07*	*01/22/20 01:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		01/15/20 18:07	01/22/20 17:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H UJ	9.5	4.8	ug/L		02/03/20 11:34	02/07/20 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*02/03/20 11:34*	*02/07/20 02:26*	*1*
2-Fluorophenol	*56*		*10 - 120*	*02/03/20 11:34*	*02/07/20 02:26*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*02/03/20 11:34*	*02/07/20 02:26*	*1*
Phenol-d5	*59*		*10 - 120*	*02/03/20 11:34*	*02/07/20 02:26*	*1*
Terphenyl-d14	*62*		*53 - 125*	*02/03/20 11:34*	*02/07/20 02:26*	*1*
2,4,6-Tribromophenol	*54*		*15 - 135*	*02/03/20 11:34*	*02/07/20 02:26*	*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	0.0053	ug/L		01/22/20 12:08	01/23/20 04:07	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		01/22/20 12:08	01/23/20 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*01/22/20 12:08*	*01/23/20 04:07*	*1*

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

Job ID: 400-182482-1

Client Sample ID: MW28-ROX-011020
Date Collected: 01/10/20 10:55
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	14	J	25	10	ug/L			01/16/20 14:01	1
Acrolein	ND		20	10	ug/L			01/16/20 14:01	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 14:01	1
Benzene	6.7		1.0	0.38	ug/L			01/16/20 14:01	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 14:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 14:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 14:01	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 14:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 14:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 14:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 14:01	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 14:01	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 14:01	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 14:01	1
cis-1,2-Dichloroethene	1.5		1.0	0.50	ug/L			01/16/20 14:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 14:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 14:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 14:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 14:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 14:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 14:01	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 14:01	1
Isopropylbenzene	2.3		1.0	0.53	ug/L			01/16/20 14:01	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 14:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 14:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 14:01	1
Methyl tert-butyl ether	79		1.0	0.74	ug/L			01/16/20 14:01	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 14:01	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 14:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 14:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 14:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 14:01	1
o-Xylene	4.8	J	5.0	0.60	ug/L			01/16/20 14:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 14:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 14:01	1

Client Sample ID: MW28-ROX-011020
Date Collected: 01/10/20 10:55
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 14:01	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 14:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 14:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 14:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 14:01	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 14:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 14:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 14:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 14:01	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 14:01	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 14:01	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 14:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 14:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 14:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 14:01	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 14:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 14:01	1
Xylenes, Total	4.8	J	10	1.6	ug/L			01/16/20 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*78 - 118*		*01/16/20 14:01*	*1*
Dibromofluoromethane	*89*		*81 - 121*		*01/16/20 14:01*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/16/20 14:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/15/20 18:07	01/21/20 18:33	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/15/20 18:07	01/21/20 18:33	1
Anthracene	ND		0.19	0.030	ug/L		01/15/20 18:07	01/21/20 18:33	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/15/20 18:07	01/21/20 18:33	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/15/20 18:07	01/21/20 18:33	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		01/15/20 18:07	01/21/20 18:33	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/15/20 18:07	01/21/20 18:33	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/15/20 18:07	01/21/20 18:33	1
Chrysene	ND		0.19	0.071	ug/L		01/15/20 18:07	01/21/20 18:33	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		01/15/20 18:07	01/21/20 18:33	1
Fluoranthene	ND		0.19	0.065	ug/L		01/15/20 18:07	01/21/20 18:33	1
Fluorene	ND		0.19	0.11	ug/L		01/15/20 18:07	01/21/20 18:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		01/15/20 18:07	01/21/20 18:33	1
Phenanthrene	ND		0.19	0.035	ug/L		01/15/20 18:07	01/21/20 18:33	1
Pyrene	ND		0.19	0.038	ug/L		01/15/20 18:07	01/21/20 18:33	1
1-Methylnaphthalene	0.15	J	0.19	0.071	ug/L		01/15/20 18:07	01/21/20 18:33	1
2-Methylnaphthalene	0.24		0.19	0.058	ug/L		01/15/20 18:07	01/21/20 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*107*		*33 - 138*	*01/15/20 18:07*	*01/21/20 18:33*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*01/15/20 18:07*	*01/21/20 18:33*	*1*

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

Job ID: 400-182482-1

Client Sample ID: MW28-ROX-011020
Date Collected: 01/10/20 10:55
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	81		19 - 130	01/15/20 18:07	01/21/20 18:33	1

* Do not use this data. Use re-analysis data (RERA)

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/15/20 18:07	01/22/20 01:48	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		01/15/20 18:07	01/22/20 01:48	1
Benzoic acid	ND		29	7.0	ug/L		01/15/20 18:07	01/22/20 01:48	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/15/20 18:07	01/22/20 01:48	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/15/20 18:07	01/22/20 01:48	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/15/20 18:07	01/22/20 01:48	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		01/15/20 18:07	01/22/20 01:48	1
~~Bis(2-ethylhexyl) phthalate~~	~~8.4~~	~~J B~~	~~9.6~~	~~4.8~~	~~ug/L~~		~~01/15/20 18:07~~	~~01/22/20 01:48~~	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/15/20 18:07	01/22/20 01:48	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/15/20 18:07	01/22/20 01:48	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/15/20 18:07	01/22/20 01:48	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/15/20 18:07	01/22/20 01:48	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/15/20 18:07	01/22/20 01:48	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/15/20 18:07	01/22/20 01:48	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/15/20 18:07	01/22/20 01:48	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/15/20 18:07	01/22/20 01:48	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 01:48	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/22/20 01:48	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		01/15/20 18:07	01/22/20 01:48	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/15/20 18:07	01/22/20 01:48	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/15/20 18:07	01/22/20 01:48	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/15/20 18:07	01/22/20 01:48	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/15/20 18:07	01/22/20 01:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.98	ug/L		01/15/20 18:07	01/22/20 01:48	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/15/20 18:07	01/22/20 01:48	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/15/20 18:07	01/22/20 01:48	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/15/20 18:07	01/22/20 01:48	1
Indene	ND		9.6	0.96	ug/L		01/15/20 18:07	01/22/20 01:48	1
Isophorone	ND		9.6	0.55	ug/L		01/15/20 18:07	01/22/20 01:48	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/15/20 18:07	01/22/20 01:48	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		01/15/20 18:07	01/22/20 01:48	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/15/20 18:07	01/22/20 01:48	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/15/20 18:07	01/22/20 01:48	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/15/20 18:07	01/22/20 01:48	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/15/20 18:07	01/22/20 01:48	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/15/20 18:07	01/22/20 01:48	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/15/20 18:07	01/22/20 01:48	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/15/20 18:07	01/22/20 01:48	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/15/20 18:07	01/22/20 01:48	1

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

Job ID: 400-182482-1

Client Sample ID: MW28-ROX-011020
Date Collected: 01/10/20 10:55
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/15/20 18:07	01/22/20 01:48	1
Phenol	ND		9.6	2.5	ug/L		01/15/20 18:07	01/22/20 01:48	1
Pyridine	ND		9.6	3.1	ug/L		01/15/20 18:07	01/22/20 01:48	1
Quinoline	ND		9.6	5.8	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/15/20 18:07	01/22/20 01:48	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/15/20 18:07	01/22/20 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*01/15/20 18:07*	*01/22/20 01:48*	*1*
2-Fluorophenol	*54*		*10 - 120*	*01/15/20 18:07*	*01/22/20 01:48*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*01/15/20 18:07*	*01/22/20 01:48*	*1*
Phenol-d5	*71*		*10 - 120*	*01/15/20 18:07*	*01/22/20 01:48*	*1*
Terphenyl-d14	*101*		*53 - 125*	*01/15/20 18:07*	*01/22/20 01:48*	*1*
2,4,6-Tribromophenol	*105*		*15 - 135*	*01/15/20 18:07*	*01/22/20 01:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/15/20 18:07	01/22/20 17:43	1
Pentachlorophenol	ND		19	1.7	ug/L		01/15/20 18:07	01/22/20 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	5.1	J H J	9.5	4.8	ug/L		02/03/20 11:34	02/07/20 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*34 - 120*	*02/03/20 11:34*	*02/07/20 02:51*	*1*
2-Fluorophenol	*49*		*10 - 120*	*02/03/20 11:34*	*02/07/20 02:51*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*02/03/20 11:34*	*02/07/20 02:51*	*1*
Phenol-d5	*59*		*10 - 120*	*02/03/20 11:34*	*02/07/20 02:51*	*1*
Terphenyl-d14	*45*	*X*	*53 - 125*	*02/03/20 11:34*	*02/07/20 02:51*	*1*
2,4,6-Tribromophenol	*53*		*15 - 135*	*02/03/20 11:34*	*02/07/20 02:51*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		01/22/20 12:08	01/23/20 03:48	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		01/22/20 12:08	01/23/20 03:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*01/22/20 12:08*	*01/23/20 03:48*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery 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.
F1	MS and/or MSD Recovery is outside acceptance 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 is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: 400-182482-1

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)
400-182482-1	TB-ROX-011020-8260-A	108	92	109
400-182482-3	MW3-ROX-011020	107	90	107
400-182482-3 MS	MW3-ROX-011020	106	92	110
400-182482-3 MSD	MW3-ROX-011020	108	94	109
400-182482-4	MW10-ROX-011020	105	93	111
400-182482-5	MW28-ROX-011020	104	89	109
LCS 400-474225/1002	Lab Control Sample	108	95	109
MB 400-474225/4	Method Blank	107	93	109

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)
400-182482-3	MW3-ROX-011020	79	48	74	59	84	85
400-182482-3 - RERA	MW3-ROX-011020	56	57	76	65	63	56
400-182482-3 MS	MW3-ROX-011020	77	61	79	72	81	102
400-182482-3 MSD	MW3-ROX-011020	73	61	76	66	50 X	96
400-182482-4	MW10-ROX-011020	78	43	76	55	93	69
400-182482-4 - RERA	MW10-ROX-011020	55	56	74	59	62	54
400-182482-5	MW28-ROX-011020	76	54	71	71	101	105
400-182482-5 - RERA	MW28-ROX-011020	49	49	74	59	45 X	53
LCS 400-474202/2-A	Lab Control Sample	84	64	87	80	105	102
LCS 400-474202/3-A	Lab Control Sample	78	55	79	66	101	55
LCS 400-476444/2-A	Lab Control Sample	52	57	80	64	63	51
LCSD 400-474202/4-A	Lab Control Sample Dup	80	73	80	81	90	68
LCSD 400-476444/3-A	Lab Control Sample Dup	55	58	85	68	67	53
MB 400-474202/1-A	Method Blank	71	40	72	62	83	60
MB 400-476444/1-A	Method Blank	57	57	76	65	77	51

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)
400-182482-3	MW3-ROX-011020	92	78	65

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)
400-182482-3 MS	MW3-ROX-011020	67	65	47
400-182482-3 MSD	MW3-ROX-011020	56	71	60
400-182482-4	MW10-ROX-011020	106	74	58
400-182482-5	MW28-ROX-011020	107	72	81
LCS 400-474202/2-A	Lab Control Sample	101	77	74
MB 400-474202/1-A	Method Blank	95	76	66

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)
400-182482-2	TB-ROX-011020-8011-A	69
400-182482-3	MW3-ROX-011020	84
400-182482-3 MS	MW3-ROX-011020	93
400-182482-3 MSD	MW3-ROX-011020	74
400-182482-4	MW10-ROX-011020	85
400-182482-5	MW28-ROX-011020	81
LCS 400-474984/2-A	Lab Control Sample	106
LCSD 400-474984/3-A	Lab Control Sample Dup	103
MB 400-474984/1-A	Method Blank	89

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-182482-1

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: 400-182482-1

Client Sample ID: TB-ROX-011020-8260-A

Lab Sample ID: 400-182482-1
Matrix: Water

Date Collected: 01/10/20 00:00
Date Received: 01/11/20 08:35

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	474225	01/16/20 12:35	AMB	TAL PEN

Client Sample ID: TB-ROX-011020-8011-A

Lab Sample ID: 400-182482-2
Matrix: Water

Date Collected: 01/10/20 00:00
Date Received: 01/11/20 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.5 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 02:29	DS	TAL PEN

Client Sample ID: MW3-ROX-011020

Lab Sample ID: 400-182482-3
Matrix: Water

Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

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	474225	01/16/20 10:42	AMB	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/22/20 00:23	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1048.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 17:01	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1053.6 mL	1 mL	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D	RERA	1			476960	02/07/20 02:01	VC1	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 17:19	KJA	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 02:48	DS	TAL PEN

Client Sample ID: MW10-ROX-011020

Lab Sample ID: 400-182482-4
Matrix: Water

Date Collected: 01/10/20 10:05
Date Received: 01/11/20 08:35

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	474225	01/16/20 13:32	AMB	TAL PEN
Total/NA	Prep	3520C			1036.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/22/20 01:27	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1036.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 17:22	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1047.8 mL	1 mL	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D	RERA	1			476960	02/07/20 02:26	VC1	TAL PEN
Total/NA	Prep	3520C			1036.2 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 18:15	KJA	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 04:07	DS	TAL PEN

Client Sample ID: MW28-ROX-011020
Date Collected: 01/10/20 10:55
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-5
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	474225	01/16/20 14:01	AMB	TAL PEN
Total/NA	Prep	3520C			1040.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/22/20 01:48	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1040.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 17:43	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1051.2 mL	1 mL	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D	RERA	1			476960	02/07/20 02:51	VC1	TAL PEN
Total/NA	Prep	3520C			1040.6 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474834	01/21/20 18:33	KJA	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 03:48	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-474202/1-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 18:21	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1000 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D	RA	1			474976	01/22/20 12:46	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			474711	01/20/20 21:15	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-474225/4
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	474225	01/16/20 10:14	AMB	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-474984/1-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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 19:14	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-476444/1-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/06/20 23:53	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-474202/2-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 18:43	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474711	01/20/20 21:33	PP1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-474202/3-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 19:04	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-474225/1002**
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	474225	01/16/20 09:01	AMB	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-474984/2-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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 19:34	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-476444/2-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/07/20 00:19	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-474202/4-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	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/21/20 19:25	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-474984/3-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	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/22/20 19:54	DS	TAL PEN

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

Lab Sample ID: LCSD 400-476444/3-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	476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D		1			476960	02/07/20 00:44	VC1	TAL PEN

Client Sample ID: MW3-ROX-011020
Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-3 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	474225	01/16/20 11:11	AMB	TAL PEN
Total/NA	Prep	3520C			1039.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/22/20 00:45	VC1	TAL PEN
Total/NA	Prep	3520C			1039.8 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474834	01/21/20 17:38	KJA	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 03:08	DS	TAL PEN

Client Sample ID: MW3-ROX-011020
Date Collected: 01/10/20 09:00
Date Received: 01/11/20 08:35

Lab Sample ID: 400-182482-3 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	474225	01/16/20 11:39	AMB	TAL PEN
Total/NA	Prep	3520C			1041.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D		1			474859	01/22/20 01:06	VC1	TAL PEN
Total/NA	Prep	3520C			1041.4 mL	1 mL	474202	01/15/20 18:07	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			474834	01/21/20 17:56	KJA	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	474984	01/22/20 12:08	DS	TAL PEN
Total/NA	Analysis	8011		1			475080	01/23/20 03:28	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: 474225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-1	TB-ROX-011020-8260-A	Total/NA	Water	8260B	
400-182482-3	MW3-ROX-011020	Total/NA	Water	8260B	
400-182482-4	MW10-ROX-011020	Total/NA	Water	8260B	
400-182482-5	MW28-ROX-011020	Total/NA	Water	8260B	
MB 400-474225/4	Method Blank	Total/NA	Water	8260B	
LCS 400-474225/1002	Lab Control Sample	Total/NA	Water	8260B	
400-182482-3 MS	MW3-ROX-011020	Total/NA	Water	8260B	
400-182482-3 MSD	MW3-ROX-011020	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 474202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-3	MW3-ROX-011020	Total/NA	Water	3520C	
400-182482-3 - RA	MW3-ROX-011020	Total/NA	Water	3520C	
400-182482-4 - RA	MW10-ROX-011020	Total/NA	Water	3520C	
400-182482-4	MW10-ROX-011020	Total/NA	Water	3520C	
400-182482-5 - RA	MW28-ROX-011020	Total/NA	Water	3520C	
400-182482-5	MW28-ROX-011020	Total/NA	Water	3520C	
MB 400-474202/1-A	Method Blank	Total/NA	Water	3520C	
MB 400-474202/1-A - RA	Method Blank	Total/NA	Water	3520C	
LCS 400-474202/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-474202/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-474202/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-182482-3 MS	MW3-ROX-011020	Total/NA	Water	3520C	
400-182482-3 MSD	MW3-ROX-011020	Total/NA	Water	3520C	

Analysis Batch: 474711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-474202/1-A	Method Blank	Total/NA	Water	8270D LL	474202
LCS 400-474202/2-A	Lab Control Sample	Total/NA	Water	8270D LL	474202

Analysis Batch: 474834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-3	MW3-ROX-011020	Total/NA	Water	8270D LL	474202
400-182482-4	MW10-ROX-011020	Total/NA	Water	8270D LL	474202
400-182482-5	MW28-ROX-011020	Total/NA	Water	8270D LL	474202
400-182482-3 MS	MW3-ROX-011020	Total/NA	Water	8270D LL	474202
400-182482-3 MSD	MW3-ROX-011020	Total/NA	Water	8270D LL	474202

Analysis Batch: 474859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-3	MW3-ROX-011020	Total/NA	Water	8270D	474202
400-182482-4	MW10-ROX-011020	Total/NA	Water	8270D	474202
400-182482-5	MW28-ROX-011020	Total/NA	Water	8270D	474202
MB 400-474202/1-A	Method Blank	Total/NA	Water	8270D	474202
LCS 400-474202/2-A	Lab Control Sample	Total/NA	Water	8270D	474202
LCS 400-474202/3-A	Lab Control Sample	Total/NA	Water	8270D	474202
LCSD 400-474202/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	474202
400-182482-3 MS	MW3-ROX-011020	Total/NA	Water	8270D	474202
400-182482-3 MSD	MW3-ROX-011020	Total/NA	Water	8270D	474202

GC/MS Semi VOA

Analysis Batch: 474976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-3 - RA	MW3-ROX-011020	Total/NA	Water	8270D	474202
400-182482-4 - RA	MW10-ROX-011020	Total/NA	Water	8270D	474202
400-182482-5 - RA	MW28-ROX-011020	Total/NA	Water	8270D	474202
MB 400-474202/1-A - RA	Method Blank	Total/NA	Water	8270D	474202

Prep Batch: 476444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-3 - RERA	MW3-ROX-011020	Total/NA	Water	3520C	
400-182482-4 - RERA	MW10-ROX-011020	Total/NA	Water	3520C	
400-182482-5 - RERA	MW28-ROX-011020	Total/NA	Water	3520C	
MB 400-476444/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 476960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-3 - RERA	MW3-ROX-011020	Total/NA	Water	8270D	476444
400-182482-4 - RERA	MW10-ROX-011020	Total/NA	Water	8270D	476444
400-182482-5 - RERA	MW28-ROX-011020	Total/NA	Water	8270D	476444
MB 400-476444/1-A	Method Blank	Total/NA	Water	8270D	476444
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	8270D	476444
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	476444

GC Semi VOA

Prep Batch: 474984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-2	TB-ROX-011020-8011-A	Total/NA	Water	8011	
400-182482-3	MW3-ROX-011020	Total/NA	Water	8011	
400-182482-4	MW10-ROX-011020	Total/NA	Water	8011	
400-182482-5	MW28-ROX-011020	Total/NA	Water	8011	
MB 400-474984/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-474984/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-474984/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-182482-3 MS	MW3-ROX-011020	Total/NA	Water	8011	
400-182482-3 MSD	MW3-ROX-011020	Total/NA	Water	8011	

Analysis Batch: 475080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182482-2	TB-ROX-011020-8011-A	Total/NA	Water	8011	474984
400-182482-3	MW3-ROX-011020	Total/NA	Water	8011	474984
400-182482-4	MW10-ROX-011020	Total/NA	Water	8011	474984
400-182482-5	MW28-ROX-011020	Total/NA	Water	8011	474984
MB 400-474984/1-A	Method Blank	Total/NA	Water	8011	474984
LCS 400-474984/2-A	Lab Control Sample	Total/NA	Water	8011	474984
LCSD 400-474984/3-A	Lab Control Sample Dup	Total/NA	Water	8011	474984
400-182482-3 MS	MW3-ROX-011020	Total/NA	Water	8011	474984
400-182482-3 MSD	MW3-ROX-011020	Total/NA	Water	8011	474984

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

Lab Sample ID: MB 400-474225/4
Matrix: Water
Analysis Batch: 474225

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/16/20 10:14	1
Acrolein	ND		20	10	ug/L			01/16/20 10:14	1
Acrylonitrile	ND		10	2.8	ug/L			01/16/20 10:14	1
Benzene	ND		1.0	0.38	ug/L			01/16/20 10:14	1
Bromobenzene	ND		1.0	0.54	ug/L			01/16/20 10:14	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/16/20 10:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Bromoform	ND		5.0	0.71	ug/L			01/16/20 10:14	1
Bromomethane	ND		1.0	0.98	ug/L			01/16/20 10:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/16/20 10:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Chloroethane	ND		1.0	0.76	ug/L			01/16/20 10:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/16/20 10:14	1
Chloroform	ND		1.0	0.60	ug/L			01/16/20 10:14	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/16/20 10:14	1
Chloromethane	ND		1.0	0.83	ug/L			01/16/20 10:14	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 10:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/16/20 10:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/16/20 10:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/16/20 10:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/16/20 10:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/16/20 10:14	1
2-Hexanone	ND		25	3.1	ug/L			01/16/20 10:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/16/20 10:14	1
Methylene bromide	ND		5.0	0.59	ug/L			01/16/20 10:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/16/20 10:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/16/20 10:14	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/16/20 10:14	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/16/20 10:14	1
Naphthalene	ND		1.0	1.0	ug/L			01/16/20 10:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/16/20 10:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/16/20 10:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/16/20 10:14	1
o-Xylene	ND		5.0	0.60	ug/L			01/16/20 10:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/16/20 10:14	1

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

Lab Sample ID: MB 400-474225/4
Matrix: Water
Analysis Batch: 474225

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/16/20 10:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/16/20 10:14	1
Styrene	ND		1.0	1.0	ug/L			01/16/20 10:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/16/20 10:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/16/20 10:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/16/20 10:14	1
Toluene	ND		1.0	0.41	ug/L			01/16/20 10:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/16/20 10:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/16/20 10:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/16/20 10:14	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/16/20 10:14	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/16/20 10:14	1
Trichloroethene	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/16/20 10:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/16/20 10:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/16/20 10:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/16/20 10:14	1
Vinyl acetate	ND		25	2.0	ug/L			01/16/20 10:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/16/20 10:14	1
Xylenes, Total	ND		10	1.6	ug/L			01/16/20 10:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*01/16/20 10:14*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*01/16/20 10:14*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*01/16/20 10:14*	*1*

Lab Sample ID: LCS 400-474225/1002
Matrix: Water
Analysis Batch: 474225

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	234		ug/L		117	43 - 160
Acrolein	500	413		ug/L		83	38 - 160
Acrylonitrile	500	472		ug/L		94	64 - 142
Benzene	50.0	46.1		ug/L		92	70 - 130
Bromobenzene	50.0	47.7		ug/L		95	70 - 132
Bromochloromethane	50.0	38.5		ug/L		77	70 - 130
Bromodichloromethane	50.0	46.0		ug/L		92	67 - 133
Bromoform	50.0	41.7		ug/L		83	57 - 140
Bromomethane	50.0	41.1		ug/L		82	10 - 160
2-Butanone (MEK)	200	185		ug/L		93	61 - 145
Carbon disulfide	50.0	47.9		ug/L		96	61 - 137
Carbon tetrachloride	50.0	43.8		ug/L		88	61 - 137
Chlorobenzene	50.0	46.2		ug/L		92	70 - 130
Dibromochloromethane	50.0	43.8		ug/L		88	67 - 135
Chloroethane	50.0	44.8		ug/L		90	55 - 141

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

Lab Sample ID: LCS 400-474225/1002
Matrix: Water
Analysis Batch: 474225

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	41.4		ug/L		83	10 - 160
Chloroform	50.0	41.0		ug/L		82	69 - 130
1-Chlorohexane	50.0	60.1		ug/L		120	69 - 130
Chloromethane	50.0	43.0		ug/L		86	58 - 137
cis-1,2-Dichloroethene	50.0	49.7		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	69 - 132
1,2-Dichlorobenzene	50.0	46.9		ug/L		94	67 - 130
1,3-Dichlorobenzene	50.0	48.6		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	70 - 130
Dichlorodifluoromethane	50.0	42.4		ug/L		85	41 - 146
1,1-Dichloroethane	50.0	47.1		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	51.2		ug/L		102	69 - 130
1,1-Dichloroethene	50.0	42.5		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	49.9		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	46.6		ug/L		93	52 - 135
1,1-Dichloropropene	50.0	46.8		ug/L		94	70 - 130
Ethylbenzene	50.0	51.0		ug/L		102	70 - 130
Ethyl methacrylate	50.0	52.5		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	44.4		ug/L		89	53 - 140
2-Hexanone	200	227		ug/L		114	65 - 137
Isopropylbenzene	50.0	50.0		ug/L		100	70 - 130
Methylene bromide	50.0	46.2		ug/L		92	70 - 130
Methylene Chloride	50.0	45.0		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	48.2		ug/L		96	66 - 130
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	70 - 130
Naphthalene	50.0	48.4		ug/L		97	47 - 149
n-Butylbenzene	50.0	54.6		ug/L		109	67 - 130
N-Propylbenzene	50.0	51.0		ug/L		102	70 - 130
o-Chlorotoluene	50.0	53.2		ug/L		106	70 - 130
o-Xylene	50.0	50.0		ug/L		100	70 - 130
p-Chlorotoluene	50.0	55.5		ug/L		111	70 - 130
p-Isopropyltoluene	50.0	51.8		ug/L		104	65 - 130
sec-Butylbenzene	50.0	53.3		ug/L		107	66 - 130
Styrene	50.0	50.5		ug/L		101	70 - 130
tert-Butylbenzene	50.0	53.7		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/L		95	67 - 131
1,1,2,2-Tetrachloroethane	50.0	54.8		ug/L		110	70 - 131
Tetrachloroethene	50.0	42.5		ug/L		85	65 - 130
Toluene	50.0	50.4		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	43.8		ug/L		88	70 - 130
trans-1,3-Dichloropropene	50.0	51.4		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	45.1		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	45.2		ug/L		90	60 - 140
1,1,1-Trichloroethane	50.0	46.2		ug/L		92	68 - 130
1,1,2-Trichloroethane	50.0	51.2		ug/L		102	70 - 130
Trichloroethene	50.0	43.0		ug/L		86	70 - 130
Trichlorofluoromethane	50.0	45.8		ug/L		92	65 - 138

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

Lab Sample ID: LCS 400-474225/1002
Matrix: Water
Analysis Batch: 474225

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	49.8		ug/L		100	70 - 130
1,2,4-Trimethylbenzene	50.0	51.5		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	52.3		ug/L		105	69 - 130
Vinyl acetate	100	83.8		ug/L		84	26 - 160
Vinyl chloride	50.0	46.0		ug/L		92	59 - 136
Xylenes, Total	100	100		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 474225

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	247		ug/L		124	43 - 150
Acrolein	ND		500	389		ug/L		78	38 - 150
Acrylonitrile	ND		500	454		ug/L		91	62 - 149
Benzene	ND		50.0	43.9		ug/L		88	56 - 142
Bromobenzene	ND		50.0	42.1		ug/L		84	59 - 136
Bromochloromethane	ND		50.0	35.7		ug/L		71	64 - 140
Bromodichloromethane	ND		50.0	44.2		ug/L		88	59 - 143
Bromoform	ND		50.0	39.1		ug/L		78	50 - 140
Bromomethane	ND		50.0	34.7		ug/L		69	10 - 150
2-Butanone (MEK)	ND		200	184		ug/L		92	55 - 150
Carbon disulfide	ND		50.0	45.8		ug/L		92	48 - 150
Carbon tetrachloride	ND		50.0	42.3		ug/L		85	55 - 145
Chlorobenzene	ND		50.0	42.6		ug/L		85	64 - 130
Dibromochloromethane	ND		50.0	40.7		ug/L		81	56 - 143
Chloroethane	ND		50.0	42.0		ug/L		84	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	40.5		ug/L		81	60 - 141
1-Chlorohexane	ND		50.0	55.2		ug/L		110	56 - 136
Chloromethane	ND		50.0	41.5		ug/L		83	49 - 148
cis-1,2-Dichloroethene	ND		50.0	47.2		ug/L		94	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.0		ug/L		92	57 - 140
1,2-Dichlorobenzene	ND		50.0	41.2		ug/L		82	52 - 137
1,3-Dichlorobenzene	ND		50.0	41.1		ug/L		82	54 - 135
1,4-Dichlorobenzene	ND		50.0	39.1		ug/L		78	53 - 135
Dichlorodifluoromethane	ND		50.0	42.1		ug/L		84	16 - 150
1,1-Dichloroethane	ND		50.0	44.3		ug/L		89	61 - 144
1,2-Dichloroethane	ND		50.0	48.4		ug/L		97	60 - 141
1,1-Dichloroethene	ND		50.0	42.1		ug/L		84	54 - 147
1,2-Dichloropropane	ND		50.0	44.3		ug/L		89	66 - 137
1,3-Dichloropropane	ND		50.0	48.3		ug/L		97	66 - 133
2,2-Dichloropropane	ND		50.0	45.3		ug/L		91	42 - 144

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

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 474225

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	44.4		ug/L		89	65 - 136
Ethylbenzene	ND		50.0	47.9		ug/L		96	58 - 131
Ethyl methacrylate	ND		50.0	51.0		ug/L		102	64 - 130
Hexachlorobutadiene	ND		50.0	37.8		ug/L		76	31 - 149
2-Hexanone	ND		200	220		ug/L		110	65 - 140
Isopropylbenzene	6.0		50.0	50.7		ug/L		89	56 - 133
Methylene bromide	ND		50.0	43.2		ug/L		86	63 - 138
Methylene Chloride	ND		50.0	41.6		ug/L		83	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	199		ug/L		99	63 - 146
Methyl tert-butyl ether	ND		50.0	45.9		ug/L		92	59 - 137
m-Xylene & p-Xylene	1.9	J	50.0	48.3		ug/L		93	57 - 130
Naphthalene	ND		50.0	44.5		ug/L		89	25 - 150
n-Butylbenzene	ND		50.0	47.2		ug/L		94	41 - 142
N-Propylbenzene	11		50.0	53.4		ug/L		86	51 - 138
o-Chlorotoluene	ND		50.0	47.6		ug/L		95	53 - 134
o-Xylene	ND		50.0	47.1		ug/L		94	61 - 130
p-Chlorotoluene	ND		50.0	48.1		ug/L		96	54 - 133
p-Isopropyltoluene	ND		50.0	44.4		ug/L		89	48 - 139
sec-Butylbenzene	ND		50.0	46.6		ug/L		93	50 - 138
Styrene	ND		50.0	46.8		ug/L		94	58 - 131
tert-Butylbenzene	0.64	J	50.0	47.8		ug/L		94	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	44.6		ug/L		89	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	53.0		ug/L		106	66 - 135
Tetrachloroethene	ND		50.0	39.3		ug/L		79	52 - 133
Toluene	1.0		50.0	48.0		ug/L		94	65 - 130
trans-1,2-Dichloroethene	ND		50.0	41.3		ug/L		83	61 - 143
trans-1,3-Dichloropropene	ND		50.0	49.9		ug/L		100	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	38.7		ug/L		77	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	40.3		ug/L		81	39 - 148
1,1,1-Trichloroethane	ND		50.0	45.5		ug/L		91	57 - 142
1,1,2-Trichloroethane	ND		50.0	50.7		ug/L		101	66 - 131
Trichloroethene	ND		50.0	40.8		ug/L		82	64 - 136
Trichlorofluoromethane	ND		50.0	42.8		ug/L		86	54 - 150
1,2,3-Trichloropropane	ND		50.0	44.2		ug/L		88	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	45.4		ug/L		91	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	46.0		ug/L		92	52 - 135
Vinyl acetate	ND		100	82.5		ug/L		83	26 - 150
Vinyl chloride	ND		50.0	43.3		ug/L		87	46 - 150
Xylenes, Total	1.9	J	100	95.5		ug/L		94	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*78 - 118*
Dibromofluoromethane	*92*		*81 - 121*
Toluene-d8 (Surr)	*110*		*80 - 120*

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

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 474225

Client Sample ID: MW3-ROX-011020
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	216		ug/L		108	43 - 150	13	30
Acrolein	ND		500	460		ug/L		92	38 - 150	17	31
Acrylonitrile	ND		500	470		ug/L		94	62 - 149	4	30
Benzene	ND		50.0	43.4		ug/L		87	56 - 142	1	30
Bromobenzene	ND		50.0	41.7		ug/L		83	59 - 136	1	30
Bromochloromethane	ND		50.0	36.2		ug/L		72	64 - 140	1	30
Bromodichloromethane	ND		50.0	42.8		ug/L		86	59 - 143	3	30
Bromoform	ND		50.0	39.4		ug/L		79	50 - 140	1	30
Bromomethane	ND		50.0	42.6		ug/L		85	10 - 150	21	50
2-Butanone (MEK)	ND		200	176		ug/L		88	55 - 150	4	30
Carbon disulfide	ND		50.0	43.5		ug/L		87	48 - 150	5	30
Carbon tetrachloride	ND		50.0	40.6		ug/L		81	55 - 145	4	30
Chlorobenzene	ND		50.0	40.7		ug/L		81	64 - 130	4	30
Dibromochloromethane	ND		50.0	39.0		ug/L		78	56 - 143	4	30
Chloroethane	ND		50.0	48.9		ug/L		98	50 - 150	15	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	38.0		ug/L		76	60 - 141	6	30
1-Chlorohexane	ND		50.0	51.6		ug/L		103	56 - 136	7	30
Chloromethane	ND		50.0	44.2		ug/L		88	49 - 148	7	31
cis-1,2-Dichloroethene	ND		50.0	47.0		ug/L		94	59 - 143	0	30
cis-1,3-Dichloropropene	ND		50.0	45.1		ug/L		90	57 - 140	2	30
1,2-Dichlorobenzene	ND		50.0	41.2		ug/L		82	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	40.7		ug/L		81	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	39.3		ug/L		79	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	44.9		ug/L		90	16 - 150	6	31
1,1-Dichloroethane	ND		50.0	43.4		ug/L		87	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	46.6		ug/L		93	60 - 141	4	30
1,1-Dichloroethene	ND		50.0	40.8		ug/L		82	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	43.9		ug/L		88	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	46.2		ug/L		92	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	43.6		ug/L		87	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	43.1		ug/L		86	65 - 136	3	30
Ethylbenzene	ND		50.0	45.5		ug/L		91	58 - 131	5	30
Ethyl methacrylate	ND		50.0	50.8		ug/L		102	64 - 130	0	30
Hexachlorobutadiene	ND		50.0	34.7		ug/L		69	31 - 149	9	36
2-Hexanone	ND		200	214		ug/L		107	65 - 140	3	30
Isopropylbenzene	6.0		50.0	48.4		ug/L		85	56 - 133	5	30
Methylene bromide	ND		50.0	43.7		ug/L		87	63 - 138	1	30
Methylene Chloride	ND		50.0	41.5		ug/L		83	60 - 146	0	32
4-Methyl-2-pentanone (MIBK)	ND		200	195		ug/L		97	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	44.7		ug/L		89	59 - 137	3	30
m-Xylene & p-Xylene	1.9	J	50.0	44.7		ug/L		86	57 - 130	8	30
Naphthalene	ND		50.0	46.1		ug/L		92	25 - 150	4	30
n-Butylbenzene	ND		50.0	45.0		ug/L		90	41 - 142	5	31
N-Propylbenzene	11		50.0	53.4		ug/L		86	51 - 138	0	30
o-Chlorotoluene	ND		50.0	46.6		ug/L		93	53 - 134	2	30
o-Xylene	ND		50.0	44.5		ug/L		89	61 - 130	6	30
p-Chlorotoluene	ND		50.0	46.3		ug/L		93	54 - 133	4	30

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

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 474225

Client Sample ID: MW3-ROX-011020
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	42.2		ug/L		84	48 - 139	5	30
sec-Butylbenzene	ND		50.0	45.3		ug/L		91	50 - 138	3	30
Styrene	ND		50.0	43.8		ug/L		88	58 - 131	7	30
tert-Butylbenzene	0.64	J	50.0	46.0		ug/L		91	54 - 146	4	30
1,1,1,2-Tetrachloroethane	ND		50.0	41.0		ug/L		82	59 - 137	8	30
1,1,2,2-Tetrachloroethane	ND		50.0	51.9		ug/L		104	66 - 135	2	30
Tetrachloroethene	ND		50.0	36.1		ug/L		72	52 - 133	8	30
Toluene	1.0		50.0	44.7		ug/L		87	65 - 130	7	30
trans-1,2-Dichloroethene	ND		50.0	39.2		ug/L		78	61 - 143	5	30
trans-1,3-Dichloropropene	ND		50.0	47.5		ug/L		95	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	38.1		ug/L		76	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	39.4		ug/L		79	39 - 148	2	30
1,1,1-Trichloroethane	ND		50.0	43.5		ug/L		87	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	47.3		ug/L		95	66 - 131	7	30
Trichloroethene	ND		50.0	39.5		ug/L		79	64 - 136	3	30
Trichlorofluoromethane	ND		50.0	47.4		ug/L		95	54 - 150	10	30
1,2,3-Trichloropropane	ND		50.0	48.0		ug/L		96	65 - 133	8	30
1,2,4-Trimethylbenzene	ND		50.0	43.7		ug/L		87	50 - 139	4	30
1,3,5-Trimethylbenzene	ND		50.0	44.4		ug/L		89	52 - 135	3	30
Vinyl acetate	ND		100	89.0		ug/L		89	26 - 150	8	33
Vinyl chloride	ND		50.0	46.9		ug/L		94	46 - 150	8	30
Xylenes, Total	1.9	J	100	89.3		ug/L		87	59 - 130	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*78 - 118*
Dibromofluoromethane	*94*		*81 - 121*
Toluene-d8 (Surr)	*109*		*80 - 120*

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
Benzenethiol	ND		10	1.7	ug/L		01/15/20 18:07	01/21/20 18:21	1
Benzoic acid	ND		30	7.3	ug/L		01/15/20 18:07	01/21/20 18:21	1
Benzyl alcohol	ND		10	2.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/15/20 18:07	01/21/20 18:21	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/15/20 18:07	01/21/20 18:21	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/15/20 18:07	01/21/20 18:21	1
Bis(2-ethylhexyl) phthalate	16.5		10	5.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/15/20 18:07	01/21/20 18:21	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Chloroaniline	ND		10	3.4	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Chlorophenol	ND		10	2.2	ug/L		01/15/20 18:07	01/21/20 18:21	1

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Dibenzofuran	ND		10	0.52	ug/L		01/15/20 18:07	01/21/20 18:21	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Diethyl phthalate	ND		10	0.70	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/15/20 18:07	01/21/20 18:21	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/15/20 18:07	01/21/20 18:21	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/15/20 18:07	01/21/20 18:21	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/15/20 18:07	01/21/20 18:21	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/15/20 18:07	01/21/20 18:21	1
1,4-Dioxane	ND		10	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/15/20 18:07	01/21/20 18:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/15/20 18:07	01/21/20 18:21	1
Hexachloroethane	ND		10	4.2	ug/L		01/15/20 18:07	01/21/20 18:21	1
Indene	ND		10	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
Isophorone	ND		10	0.57	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Methylphenol	ND		10	1.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Nitroaniline	ND		10	2.2	ug/L		01/15/20 18:07	01/21/20 18:21	1
3-Nitroaniline	ND		10	1.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Nitroaniline	ND		10	2.5	ug/L		01/15/20 18:07	01/21/20 18:21	1
Nitrobenzene	ND		10	0.55	ug/L		01/15/20 18:07	01/21/20 18:21	1
2-Nitrophenol	ND		10	0.65	ug/L		01/15/20 18:07	01/21/20 18:21	1
4-Nitrophenol	ND		10	2.1	ug/L		01/15/20 18:07	01/21/20 18:21	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/15/20 18:07	01/21/20 18:21	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/15/20 18:07	01/21/20 18:21	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/15/20 18:07	01/21/20 18:21	1
Pentachlorophenol	ND		20	1.8	ug/L		01/15/20 18:07	01/21/20 18:21	1
Phenol	ND		10	2.6	ug/L		01/15/20 18:07	01/21/20 18:21	1
Pyridine	ND		10	3.2	ug/L		01/15/20 18:07	01/21/20 18:21	1
Quinoline	ND		10	6.0	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/15/20 18:07	01/21/20 18:21	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/15/20 18:07	01/21/20 18:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*34 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
2-Fluorophenol	*40*		*10 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
Phenol-d5	*62*		*10 - 120*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
Terphenyl-d14	*83*		*53 - 125*	*01/15/20 18:07*	*01/21/20 18:21*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*01/15/20 18:07*	*01/21/20 18:21*	*1*

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

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	25.7		ug/L		86	29 - 120
Benzoic acid	117	68.0		ug/L		58	10 - 150
Benzyl alcohol	30.0	26.2		ug/L		87	19 - 125
Bis(2-chloroethoxy)methane	30.0	25.6		ug/L		85	45 - 120
Bis(2-chloroethyl)ether	30.0	25.3		ug/L		84	48 - 120
bis (2-chloroisopropyl) ether	30.0	26.3		ug/L		88	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	34.0		ug/L		113	48 - 150
4-Bromophenyl phenyl ether	30.0	25.6		ug/L		85	55 - 122
Butyl benzyl phthalate	30.0	32.6		ug/L		109	46 - 145
4-Chloroaniline	30.0	21.1		ug/L		70	30 - 120
4-Chloro-3-methylphenol	30.0	25.9		ug/L		86	39 - 140
2-Chloronaphthalene	30.0	26.8		ug/L		89	52 - 120
2-Chlorophenol	30.0	22.4		ug/L		75	34 - 120
4-Chlorophenyl phenyl ether	30.0	28.6		ug/L		95	58 - 124
Dibenz[a,h]acridine	30.0	22.0		ug/L		73	46 - 149
Dibenzofuran	30.0	29.0		ug/L		97	58 - 123
3,3'-Dichlorobenzidine	40.0	40.5		ug/L		101	39 - 135
2,4-Dichlorophenol	30.0	24.3		ug/L		81	39 - 128
Diethyl phthalate	30.0	30.9		ug/L		103	44 - 146
2,4-Dimethylphenol	30.0	25.9		ug/L		86	44 - 120
Dimethyl phthalate	30.0	29.2		ug/L		97	50 - 131
Di-n-butyl phthalate	30.0	34.7		ug/L		116	55 - 131
4,6-Dinitro-ortho-cresol	60.0	40.8		ug/L		68	10 - 150
2,4-Dinitrophenol	60.0	37.2		ug/L		62	10 - 150
2,4-Dinitrotoluene	30.0	29.8		ug/L		99	58 - 140
2,6-Dinitrotoluene	30.0	29.1		ug/L		97	57 - 130
Di-n-octyl phthalate	30.0	32.2		ug/L		107	50 - 150
1,4-Dioxane	30.0	22.2		ug/L		74	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	27.0		ug/L		90	47 - 123
Hexachlorobenzene	30.0	28.5		ug/L		95	52 - 131
Hexachlorocyclopentadiene	30.0	10.3	J	ug/L		34	10 - 129
Hexachloroethane	30.0	18.0		ug/L		60	20 - 120
Indene	30.0	21.9		ug/L		73	47 - 120
Isophorone	30.0	25.9		ug/L		86	49 - 120
2-Methylphenol	30.0	24.8		ug/L		83	39 - 123
3 & 4 Methylphenol	30.0	25.5		ug/L		85	38 - 121
2-Nitroaniline	30.0	31.9		ug/L		106	47 - 150
3-Nitroaniline	30.0	30.5		ug/L		102	34 - 132
4-Nitroaniline	30.0	36.7		ug/L		122	41 - 135
Nitrobenzene	30.0	24.9		ug/L		83	47 - 120
2-Nitrophenol	30.0	24.3		ug/L		81	28 - 136
4-Nitrophenol	60.0	57.2		ug/L		95	10 - 150
N-Nitrosodimethylamine	30.0	25.1		ug/L		84	22 - 148
N-Nitrosodi-n-propylamine	30.0	25.7		ug/L		86	44 - 120
N-Nitrosodiphenylamine	29.8	25.3		ug/L		85	56 - 120
Pentachlorophenol	60.0	45.1		ug/L		75	15 - 141
Phenol	30.0	23.4		ug/L		78	33 - 120
Pyridine	60.0	44.6		ug/L		74	26 - 120

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

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	27.5		ug/L		92	51 - 129
2,4,5-Trichlorophenol	30.0	27.5		ug/L		92	38 - 147
2,4,6-Trichlorophenol	30.0	27.4		ug/L		91	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*34 - 120*
2-Fluorophenol	*64*		*10 - 120*
Nitrobenzene-d5	*87*		*27 - 120*
Phenol-d5	*80*		*10 - 120*
Terphenyl-d14	*105*		*53 - 125*
2,4,6-Tribromophenol	*102*		*15 - 135*

Lab Sample ID: LCS 400-474202/3-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

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	*78*		*34 - 120*
2-Fluorophenol	*55*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*66*		*10 - 120*
Terphenyl-d14	*101*		*53 - 125*
2,4,6-Tribromophenol	*55*		*15 - 135*

Lab Sample ID: LCSD 400-474202/4-A
Matrix: Water
Analysis Batch: 474859

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*34 - 120*
2-Fluorophenol	*73*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*81*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*68*		*15 - 135*

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		28.9	14.9		ug/L		52	10 - 143

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

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzoic acid	ND		112	97.3		ug/L		87	10 - 134
Benzyl alcohol	ND		28.9	23.7		ug/L		82	10 - 154
Bis(2-chloroethoxy)methane	ND		28.9	22.1		ug/L		77	14 - 147
Bis(2-chloroethyl)ether	ND		28.9	21.4		ug/L		74	28 - 130
bis (2-chloroisopropyl) ether	ND		28.9	21.8		ug/L		75	10 - 141
Bis(2-ethylhexyl) phthalate	6.6	J F1 B	28.9	25.8		ug/L		67	43 - 160
4-Bromophenyl phenyl ether	ND		28.9	22.2		ug/L		77	26 - 159
Butyl benzyl phthalate	ND		28.9	30.3		ug/L		105	43 - 151
4-Chloroaniline	ND		28.9	11.1		ug/L		38	10 - 152
4-Chloro-3-methylphenol	ND		28.9	23.2		ug/L		80	17 - 156
2-Chloronaphthalene	ND		28.9	23.0		ug/L		80	10 - 155
2-Chlorophenol	ND		28.9	20.1		ug/L		70	19 - 130
4-Chlorophenyl phenyl ether	ND		28.9	24.0		ug/L		83	25 - 161
Dibenz[a,h]acridine	ND		28.9	21.3		ug/L		74	42 - 147
Dibenzofuran	ND		28.9	24.6		ug/L		85	18 - 157
3,3'-Dichlorobenzidine	ND	F1	38.5	ND	F1	ug/L		0	10 - 172
2,4-Dichlorophenol	ND		28.9	22.1		ug/L		77	16 - 147
Diethyl phthalate	ND		28.9	25.7		ug/L		89	23 - 160
2,4-Dimethylphenol	ND		28.9	23.0		ug/L		80	25 - 146
Dimethyl phthalate	ND		28.9	24.9		ug/L		86	11 - 158
Di-n-butyl phthalate	ND		28.9	27.8		ug/L		96	28 - 162
4,6-Dinitro-ortho-cresol	ND		57.7	44.8		ug/L		78	10 - 168
2,4-Dinitrophenol	ND		57.7	46.2		ug/L		80	10 - 166
2,4-Dinitrotoluene	ND		28.9	25.4		ug/L		88	26 - 158
2,6-Dinitrotoluene	ND		28.9	25.0		ug/L		87	19 - 157
Di-n-octyl phthalate	ND	F2	28.9	22.9		ug/L		79	42 - 150
1,4-Dioxane	ND		28.9	14.1		ug/L		49	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.9	22.7		ug/L		79	19 - 162
Hexachlorobenzene	ND		28.9	23.7		ug/L		82	45 - 145
Hexachlorocyclopentadiene	ND	F2	28.9	11.3	J	ug/L		39	10 - 151
Hexachloroethane	ND		28.9	22.4		ug/L		78	29 - 130
Indene	ND		28.9	18.8		ug/L		65	22 - 130
Isophorone	ND		28.9	22.6		ug/L		78	24 - 144
2-Methylphenol	ND		28.9	21.3		ug/L		74	22 - 130
3 & 4 Methylphenol	ND		28.9	22.3		ug/L		77	31 - 130
2-Nitroaniline	ND		28.9	26.8		ug/L		93	10 - 162
3-Nitroaniline	ND		28.9	13.9		ug/L		48	10 - 163
4-Nitroaniline	ND		28.9	30.1		ug/L		104	10 - 162
Nitrobenzene	ND		28.9	21.5		ug/L		75	34 - 135
2-Nitrophenol	ND		28.9	22.2		ug/L		77	27 - 134
4-Nitrophenol	ND		57.7	49.1		ug/L		85	10 - 175
N-Nitrosodimethylamine	ND		28.9	21.1		ug/L		73	10 - 139
N-Nitrosodi-n-propylamine	ND		28.9	22.4		ug/L		78	13 - 147
N-Nitrosodiphenylamine	ND		28.6	21.2		ug/L		74	31 - 150
Pentachlorophenol	ND		57.7	54.8		ug/L		95	10 - 180
Phenol	ND		28.9	20.1		ug/L		70	23 - 130
Pyridine	ND		57.7	28.4		ug/L		49	10 - 130
Quinoline	ND		28.9	21.5		ug/L		74	10 - 180

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

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		28.9	25.3		ug/L		88	43 - 137
2,4,6-Trichlorophenol	ND		28.9	25.7		ug/L		89	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*34 - 120*
2-Fluorophenol	*61*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*72*		*10 - 120*
Terphenyl-d14	*81*		*53 - 125*
2,4,6-Tribromophenol	*102*		*15 - 135*

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		28.8	18.6		ug/L		64	10 - 143	22	63
Benzoic acid	ND		112	84.6		ug/L		76	10 - 134	14	49
Benzyl alcohol	ND		28.8	23.1		ug/L		80	10 - 154	2	37
Bis(2-chloroethoxy)methane	ND		28.8	21.6		ug/L		75	14 - 147	3	70
Bis(2-chloroethyl)ether	ND		28.8	21.4		ug/L		74	28 - 130	0	42
bis (2-chloroisopropyl) ether	ND		28.8	21.8		ug/L		76	10 - 141	0	41
Bis(2-ethylhexyl) phthalate	6.6	J F1 B	28.8	18.6	F1	ug/L		42	43 - 160	32	35
4-Bromophenyl phenyl ether	ND		28.8	19.9		ug/L		69	26 - 159	11	30
Butyl benzyl phthalate	ND		28.8	23.9		ug/L		83	43 - 151	24	32
4-Chloroaniline	ND		28.8	12.5		ug/L		44	10 - 152	13	94
4-Chloro-3-methylphenol	ND		28.8	21.2		ug/L		74	17 - 156	9	40
2-Chloronaphthalene	ND		28.8	22.6		ug/L		78	10 - 155	2	29
2-Chlorophenol	ND		28.8	19.3		ug/L		67	19 - 130	4	42
4-Chlorophenyl phenyl ether	ND		28.8	22.7		ug/L		79	25 - 161	6	27
Dibenz[a,h]acridine	ND		28.8	21.2		ug/L		74	42 - 147	0	40
Dibenzofuran	ND		28.8	23.7		ug/L		82	18 - 157	4	29
3,3'-Dichlorobenzidine	ND	F1	38.4	5.58	J	ug/L		15	10 - 172	NC	58
2,4-Dichlorophenol	ND		28.8	20.2		ug/L		70	16 - 147	9	43
Diethyl phthalate	ND		28.8	23.4		ug/L		81	23 - 160	9	40
2,4-Dimethylphenol	ND		28.8	21.5		ug/L		75	25 - 146	7	47
Dimethyl phthalate	ND		28.8	22.5		ug/L		78	11 - 158	10	36
Di-n-butyl phthalate	ND		28.8	25.7		ug/L		89	28 - 162	8	32
4,6-Dinitro-ortho-cresol	ND		57.6	40.1		ug/L		70	10 - 168	11	42
2,4-Dinitrophenol	ND		57.6	42.3		ug/L		73	10 - 166	9	36
2,4-Dinitrotoluene	ND		28.8	24.1		ug/L		84	26 - 158	6	28
2,6-Dinitrotoluene	ND		28.8	23.3		ug/L		81	19 - 157	7	28
Di-n-octyl phthalate	ND	F2	28.8	15.8	F2	ug/L		55	42 - 150	37	35
1,4-Dioxane	ND		28.8	15.9		ug/L		55	10 - 130	12	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.8	21.8		ug/L		76	19 - 162	4	40
Hexachlorobenzene	ND		28.8	21.0		ug/L		73	45 - 145	12	33
Hexachlorocyclopentadiene	ND	F2	28.8	5.00	J F2	ug/L		17	10 - 151	77	50
Hexachloroethane	ND		28.8	20.6		ug/L		72	29 - 130	8	41

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

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 474859

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	ND		28.8	18.9		ug/L		66	22 - 130	1	40
Isophorone	ND		28.8	21.8		ug/L		76	24 - 144	3	33
2-Methylphenol	ND		28.8	19.8		ug/L		69	22 - 130	7	47
3 & 4 Methylphenol	ND		28.8	20.6		ug/L		72	31 - 130	8	47
2-Nitroaniline	ND		28.8	25.3		ug/L		88	10 - 162	6	33
3-Nitroaniline	ND		28.8	18.1		ug/L		63	10 - 163	26	39
4-Nitroaniline	ND		28.8	31.3		ug/L		109	10 - 162	4	50
Nitrobenzene	ND		28.8	20.3		ug/L		71	34 - 135	6	35
2-Nitrophenol	ND		28.8	20.4		ug/L		71	27 - 134	8	43
4-Nitrophenol	ND		57.6	45.9		ug/L		80	10 - 175	7	82
N-Nitrosodimethylamine	ND		28.8	21.3		ug/L		74	10 - 139	1	62
N-Nitrosodi-n-propylamine	ND		28.8	22.0		ug/L		76	13 - 147	2	36
N-Nitrosodiphenylamine	ND		28.8	20.5		ug/L		72	31 - 150	3	34
Pentachlorophenol	ND		57.6	49.3		ug/L		85	10 - 180	11	42
Phenol	ND		28.8	18.4		ug/L		64	23 - 130	8	52
Pyridine	ND		57.6	31.0		ug/L		54	10 - 130	9	55
Quinoline	ND		28.8	21.4		ug/L		74	10 - 180	0	40
2,4,5-Trichlorophenol	ND		28.8	23.4		ug/L		81	43 - 137	8	42
2,4,6-Trichlorophenol	ND		28.8	23.5		ug/L		81	42 - 135	9	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*34 - 120*
2-Fluorophenol	*61*		*10 - 120*
Nitrobenzene-d5	*76*		*27 - 120*
Phenol-d5	*66*		*10 - 120*
Terphenyl-d14	*50*	*X*	*53 - 125*
2,4,6-Tribromophenol	*96*		*15 - 135*

Lab Sample ID: MB 400-476444/1-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		02/03/20 11:34	02/06/20 23:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
2-Fluorophenol	*57*		*10 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
Phenol-d5	*65*		*10 - 120*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
Terphenyl-d14	*77*		*53 - 125*	*02/03/20 11:34*	*02/06/20 23:53*	*1*
2,4,6-Tribromophenol	*51*		*15 - 135*	*02/03/20 11:34*	*02/06/20 23:53*	*1*

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

Lab Sample ID: LCS 400-476444/2-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	30.0	28.7		ug/L		96	48 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*52*		*34 - 120*
2-Fluorophenol	*57*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*64*		*10 - 120*
Terphenyl-d14	*63*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

Lab Sample ID: LCSD 400-476444/3-A
Matrix: Water
Analysis Batch: 476960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	30.0	22.8		ug/L		76	48 - 150	23	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*58*		*10 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*67*		*53 - 125*
2,4,6-Tribromophenol	*53*		*15 - 135*

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine - RA	ND		10	3.0	ug/L		01/15/20 18:07	01/22/20 12:46	1

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474711

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/15/20 18:07	01/20/20 21:15	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/15/20 18:07	01/20/20 21:15	1
Anthracene	ND		0.20	0.031	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/15/20 18:07	01/20/20 21:15	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/15/20 18:07	01/20/20 21:15	1

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

Lab Sample ID: MB 400-474202/1-A
Matrix: Water
Analysis Batch: 474711

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.20	0.074	ug/L		01/15/20 18:07	01/20/20 21:15	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		01/15/20 18:07	01/20/20 21:15	1
Fluoranthene	ND		0.20	0.068	ug/L		01/15/20 18:07	01/20/20 21:15	1
Fluorene	ND		0.20	0.11	ug/L		01/15/20 18:07	01/20/20 21:15	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		01/15/20 18:07	01/20/20 21:15	1
Phenanthrene	ND		0.20	0.036	ug/L		01/15/20 18:07	01/20/20 21:15	1
Pyrene	ND		0.20	0.040	ug/L		01/15/20 18:07	01/20/20 21:15	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/15/20 18:07	01/20/20 21:15	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/15/20 18:07	01/20/20 21:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*33 - 138*	*01/15/20 18:07*	*01/20/20 21:15*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*01/15/20 18:07*	*01/20/20 21:15*	*1*
Nitrobenzene-d5	*66*		*19 - 130*	*01/15/20 18:07*	*01/20/20 21:15*	*1*

Lab Sample ID: LCS 400-474202/2-A
Matrix: Water
Analysis Batch: 474711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	26.0		ug/L		87	41 - 120
Acenaphthylene	30.0	24.7		ug/L		82	44 - 120
Anthracene	30.0	23.5		ug/L		78	49 - 120
Benzo[a]anthracene	30.0	25.2		ug/L		84	61 - 135
Benzo[a]pyrene	30.0	23.5		ug/L		78	52 - 120
Benzo[b]fluoranthene	30.0	29.4		ug/L		98	53 - 134
Benzo[g,h,i]perylene	30.0	19.4		ug/L		65	47 - 133
Benzo[k]fluoranthene	30.0	27.7		ug/L		92	57 - 134
Chrysene	30.0	25.9		ug/L		86	55 - 122
Dibenz(a,h)anthracene	30.0	22.1		ug/L		74	48 - 146
Fluoranthene	30.0	23.7		ug/L		79	54 - 128
Fluorene	30.0	26.2		ug/L		87	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.6		ug/L		75	43 - 142
Phenanthrene	30.0	24.3		ug/L		81	48 - 120
Pyrene	30.0	25.5		ug/L		85	48 - 132
1-Methylnaphthalene	30.0	24.4		ug/L		81	41 - 120
2-Methylnaphthalene	30.0	22.5		ug/L		75	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*101*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*74*		*19 - 130*

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

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 474834

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		28.9	21.7		ug/L		75	35 - 113
Acenaphthylene	ND		28.9	18.9		ug/L		66	41 - 118
Anthracene	ND		28.9	18.9		ug/L		65	45 - 122
Benzo[a]anthracene	ND	F1	28.9	17.8		ug/L		62	55 - 133
Benzo[a]pyrene	ND	F1	28.9	14.9		ug/L		52	50 - 108
Benzo[b]fluoranthene	ND		28.9	18.2		ug/L		63	50 - 128
Benzo[g,h,i]perylene	ND	F1	28.9	16.1		ug/L		56	46 - 133
Benzo[k]fluoranthene	ND	F1	28.9	16.7		ug/L		58	52 - 128
Chrysene	ND	F1	28.9	17.1		ug/L		59	52 - 116
Dibenz(a,h)anthracene	ND	F1	28.9	17.1		ug/L		59	52 - 143
Fluoranthene	ND		28.9	19.2		ug/L		67	32 - 150
Fluorene	ND		28.9	20.8		ug/L		72	15 - 150
Indeno[1,2,3-cd]pyrene	ND		28.9	16.7		ug/L		58	41 - 141
Phenanthrene	ND		28.9	19.6		ug/L		68	36 - 125
Pyrene	ND		28.9	20.8		ug/L		72	41 - 127
1-Methylnaphthalene	0.76		28.9	19.8		ug/L		66	10 - 150
2-Methylnaphthalene	ND		28.9	17.9		ug/L		62	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*67*		*33 - 138*
2-Fluorobiphenyl	*65*		*15 - 122*
Nitrobenzene-d5	*47*		*19 - 130*

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 474834

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.8	22.1		ug/L		77	35 - 113	2	49
Acenaphthylene	ND		28.8	19.7		ug/L		68	41 - 118	4	48
Anthracene	ND		28.8	19.6		ug/L		68	45 - 122	4	56
Benzo[a]anthracene	ND	F1	28.8	14.4	F1	ug/L		50	55 - 133	21	57
Benzo[a]pyrene	ND	F1	28.8	11.5	F1	ug/L		40	50 - 108	26	59
Benzo[b]fluoranthene	ND		28.8	15.5		ug/L		54	50 - 128	16	62
Benzo[g,h,i]perylene	ND	F1	28.8	10.5	F1	ug/L		36	46 - 133	42	58
Benzo[k]fluoranthene	ND	F1	28.8	13.3	F1	ug/L		46	52 - 128	23	58
Chrysene	ND	F1	28.8	14.0	F1	ug/L		49	52 - 116	20	59
Dibenz(a,h)anthracene	ND	F1	28.8	12.3	F1	ug/L		43	52 - 143	33	60
Fluoranthene	ND		28.8	18.2		ug/L		63	32 - 150	5	59
Fluorene	ND		28.8	20.9		ug/L		73	15 - 150	1	49
Indeno[1,2,3-cd]pyrene	ND		28.8	12.1		ug/L		42	41 - 141	32	58
Phenanthrene	ND		28.8	19.9		ug/L		69	36 - 125	1	69
Pyrene	ND		28.8	22.2		ug/L		77	41 - 127	7	58
1-Methylnaphthalene	0.76		28.8	20.6		ug/L		69	10 - 150	4	66
2-Methylnaphthalene	ND		28.8	19.1		ug/L		66	10 - 150	6	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*56*		*33 - 138*

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

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 474834

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474202

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	71		15 - 122
Nitrobenzene-d5	60		19 - 130

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-474984/1-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474984

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		01/22/20 12:08	01/22/20 19:14	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/22/20 12:08	01/22/20 19:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		51 - 149	01/22/20 12:08	01/22/20 19:14	1

Lab Sample ID: LCS 400-474984/2-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.108		ug/L		108	60 - 140
1,2-Dibromoethane	0.101	0.113		ug/L		112	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	106		51 - 149

Lab Sample ID: LCSD 400-474984/3-A
Matrix: Water
Analysis Batch: 475080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474984

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.111		ug/L		110	60 - 140	2	30
1,2-Dibromoethane	0.101	0.127		ug/L		126	60 - 140	12	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	103		51 - 149

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 475080

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474984

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F2 F1	0.0994	0.284	F1	ug/L		286	65 - 135
1,2-Dibromoethane	ND		0.0996	0.0972		ug/L		98	65 - 135

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-182482-3 MS
Matrix: Water
Analysis Batch: 475080

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474984

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	*93*		*51 - 149*

Lab Sample ID: 400-182482-3 MSD
Matrix: Water
Analysis Batch: 475080

Client Sample ID: MW3-ROX-011020
Prep Type: Total/NA
Prep Batch: 474984

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND	F2 F1	0.101	0.170	F1 F2	ug/L		168	65 - 135	50	20
1,2-Dibromoethane	ND		0.102	0.105		ug/L		103	65 - 135	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	*74*		*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:	PlaNet Site or Project ID
Bob Billman	25278
PO #	GSAP Project ID
60619901 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/FI/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/10/2020
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 - 1.03.001 / 60619901 - 1.03.0011

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
INVOICE 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
ACCOUNT #:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): James Rogers, Ben Burlegon
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

400-182482 COC

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ON WEEKEND ☐ RESULTS NEEDED

☐ 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

☑ 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 - 1.03.001: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0011: VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-011020-8260-A	1/10/20	0000	Water	2					2	2				
	TB-ROX-011020-8011-1	1/10/20	0000	H2O	2					2			2		
	MW3-ROX-011020	1/10/20	0900	H2O	4			2		6	2	1	2	1	
	MW3-ROX-011020-MS	1/10/20	0900	H2O	4			2		6	2	1	2	1	
	MW3-ROX-011020-MSD	1/10/20	0900	H2O	4			2		6	2	1	2	1	
	MW10-ROX-011020	1/10/20	1005	H2O	4			2		6	2	1	2	1	
	MW28-ROX-011020	1/10/20	1055	H2O	4			2		6	2	1	2	1	

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
James Rogers	Fedex: 4931 8203 7546, 4931 8203 7535	1/10/2020	1600
	Custody Seal #S: 1197544, 1197545, 1197546, 1197547	1-11-20 ~~0835~~	0835

1.4°C, 0.4°C IR-9

Version: 14Dec15

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2/11/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182482-1

Login Number: 182482
List Number: 1
Creator: Conrady, Hank W

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	1.4°C 0.4°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: 400-182482-1

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	02-22-20
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	200041	10-09-19 *
Illinois	NELAP	004586	10-09-19 *
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	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 1st Quarter 2020 Data Review

Laboratory SDG: 400-182619-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 3/1/2020

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

Sample Identification	Sample Identification
TB-ROX-011320-8260-A	TB-ROX-011320-8011-A
ROST4PZG-ROX-011320	MW9-ROX-011320
MW9-ROX-011320-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, laboratory case narrative indicated bis(2-ethylhexyl) phthalate was detected in the method blank. Benzenethiol and 1,2-dibromo-3-chloropropane LCS and/or LCSD recoveries were outside evaluation criteria. The SVOC internal standard recovery for chrysene-d_{12} was outside criteria in the continuing calibration verification. The continuing calibration verification for benzo[g,h,i]perylene 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?

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-474533/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	27.6 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 400-474533/4-A/5-A	SVOCs	Benzenethiol	**3/5**	30	10-120/30
LCS/LCSD 400-474833/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	131/**153**	16	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
ROST4PZG-ROX-011320	SVOCs	Benzenethiol	**UJ**
MW9-ROX-011320	SVOCs	Benzenethiol	**UJ**
MW9-ROX-011320-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	IS Criteria
ICV 400-472769/11	SVOCs	Chrysene-d_{12}	**381274**	417202-1668806

Initial calibration verification (ICV) is a quality control sample and does not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW9-ROX-011320	MW9-ROX-011320-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for benzo[g,h,i]perylene was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-011320	PAHs	Benzo[g,h,i]perylene	**UJ**
MW9-ROX-011320	PAHs	Benzo[g,h,i]perylene	**UJ**
MW9-ROX-011320-Dup	PAHs	Benzo[g,h,i]perylene	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-182619-1
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:
2/7/2020 4:41:21 PM
Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

Designee for

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 3/1/2020 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: 400-182619-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

CASE NARRATIVE

Client: AECOM Technical Services Inc.

Project: ROXANA QUARTERLY GW

Report Number: 400-182619-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 01/15/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB-ROX-011320-8260-A (400-182619-1), ROST4PZG-ROX-011320 (400-182619-3), MW9-ROX-011320 (400-182619-4) and MW9-ROX-011320-DUP (400-182619-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 01/19/2020.

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-011320-8260-A (400-182619-1), ROST4PZG-ROX-011320 (400-182619-3), MW9-ROX-011320 (400-182619-4) and MW9-ROX-011320-DUP (400-182619-5). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

The initial calibration verification (ICV) analyzed in batch 400-470618 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.

1,2-DIBROMOETHANE AND 1,2-DIBROMO-3-CHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples TB-ROX-011320-8011-A (400-182619-2), ROST4PZG-ROX-011320 (400-182619-3), MW9-ROX-011320 (400-182619-4) and MW9-ROX-011320-DUP (400-182619-5) were analyzed for 1,2-dibromoethane and 1,2-dibromo-3-chloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared and analyzed on 01/21/2020.

1,2-Dibromo-3-Chloropropane failed the recovery criteria high for LCSD 400-474833/3-A. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 400-474884 recovered above the upper control limit for

Job ID: 400-182619-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples ROST4PZG-ROX-011320 (400-182619-3), MW9-ROX-011320 (400-182619-4) and MW9-ROX-011320-DUP (400-182619-5) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 01/17/2020 and analyzed on 01/22/2020 and 02/06/2020.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 400-474533/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. 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.

Benzenethiol failed the recovery criteria low for LCS 400-474533/4-A. Benzenethiol failed the recovery criteria low for LCSD 400-474533/5-A. Refer to the QC report for details. 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.

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 400-474976/2). These results have been reported and qualified.

The initial calibration verification (ICV) analyzed in batch 400-469009 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated. Only spiked QC is associated with this ICV and is within its limits.

The continuing calibration verification (CCV) associated with batch 400-474976 recovered above the upper control limit for 1,4-Dioxane, Bis(2-ethylhexyl) phthalate, Di-n-butyl phthalate and Butyl benzyl phthalate. 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.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

Samples ROST4PZG-ROX-011320 (400-182619-3), MW9-ROX-011320 (400-182619-4) and MW9-ROX-011320-DUP (400-182619-5) were analyzed for polycyclic aromatic hydrocarbons (PAHs) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 01/17/2020 and analyzed on 01/22/2020.

The continuing calibration verification (CCV) associated with batch 400-475004 recovered outside acceptance criteria, low biased, for Benzo[g,h,i]perylene. 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.

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

Sample Summary

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

Job ID: 400-182619-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182619-1	TB-ROX-011320-8260-A	Water	01/13/20 00:00	01/15/20 10:10	
400-182619-2	TB-ROX-011320-8011-A	Water	01/13/20 00:00	01/15/20 10:10	
400-182619-3	ROST4PZG-ROX-011320	Water	01/13/20 11:15	01/15/20 10:10	
400-182619-4	MW9-ROX-011320	Water	01/13/20 12:25	01/15/20 10:10	
400-182619-5	MW9-ROX-011320-DUP	Water	01/13/20 12:25	01/15/20 10:10	

Detection Summary

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

Job ID: 400-182619-1

Client Sample ID: TB-ROX-011320-8260-A

Lab Sample ID: 400-182619-1

No Detections.

Client Sample ID: TB-ROX-011320-8011-A

Lab Sample ID: 400-182619-2

No Detections.

Client Sample ID: ROST4PZG-ROX-011320

Lab Sample ID: 400-182619-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.55	J	1.0	0.38	ug/L	1		8260B	Total/NA
Toluene	4.1		1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: MW9-ROX-011320

Lab Sample ID: 400-182619-4

No Detections.

Client Sample ID: MW9-ROX-011320-DUP

Lab Sample ID: 400-182619-5

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-182619-1

Client Sample ID: TB-ROX-011320-8260-A
Date Collected: 01/13/20 00:00
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/20 15:41	1
Acrolein	ND		20	10	ug/L			01/19/20 15:41	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/20 15:41	1
Benzene	ND		1.0	0.38	ug/L			01/19/20 15:41	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/20 15:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/19/20 15:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Bromoform	ND		5.0	0.71	ug/L			01/19/20 15:41	1
Bromomethane	ND		1.0	0.98	ug/L			01/19/20 15:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/20 15:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/20 15:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/20 15:41	1
Chloroform	ND		1.0	0.60	ug/L			01/19/20 15:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/19/20 15:41	1
Chloromethane	ND		1.0	0.83	ug/L			01/19/20 15:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/20 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/20 15:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/20 15:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/20 15:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/20 15:41	1
2-Hexanone	ND		25	3.1	ug/L			01/19/20 15:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/20 15:41	1
Methylene bromide	ND		5.0	0.59	ug/L			01/19/20 15:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/20 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/20 15:41	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/19/20 15:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/19/20 15:41	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/20 15:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/20 15:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/20 15:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/20 15:41	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/20 15:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/20 15:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/20 15:41	1

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

Job ID: 400-182619-1

Client Sample ID: TB-ROX-011320-8260-A
Date Collected: 01/13/20 00:00
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/20 15:41	1
Styrene	ND		1.0	1.0	ug/L			01/19/20 15:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/20 15:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/19/20 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/19/20 15:41	1
Toluene	ND		1.0	0.41	ug/L			01/19/20 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 15:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/19/20 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/20 15:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/19/20 15:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/19/20 15:41	1
Trichloroethene	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/20 15:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/20 15:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/20 15:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/20 15:41	1
Vinyl acetate	ND		25	2.0	ug/L			01/19/20 15:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/20 15:41	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/20 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*01/19/20 15:41*	*1*
Dibromofluoromethane	*89*		*81 - 121*		*01/19/20 15:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*01/19/20 15:41*	*1*

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

Job ID: 400-182619-1

Client Sample ID: TB-ROX-011320-8011-A
Date Collected: 01/13/20 00:00
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-2
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		01/21/20 12:12	01/21/20 21:44	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		01/21/20 12:12	01/21/20 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*01/21/20 12:12*	*01/21/20 21:44*	*1*

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

Job ID: 400-182619-1

Client Sample ID: ROST4PZG-ROX-011320
Date Collected: 01/13/20 11:15
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/20 16:33	1
Acrolein	ND		20	10	ug/L			01/19/20 16:33	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/20 16:33	1
Benzene	0.55	J	1.0	0.38	ug/L			01/19/20 16:33	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/20 16:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/19/20 16:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Bromoform	ND		5.0	0.71	ug/L			01/19/20 16:33	1
Bromomethane	ND		1.0	0.98	ug/L			01/19/20 16:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/20 16:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/20 16:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/20 16:33	1
Chloroform	ND		1.0	0.60	ug/L			01/19/20 16:33	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/19/20 16:33	1
Chloromethane	ND		1.0	0.83	ug/L			01/19/20 16:33	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 16:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/20 16:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/20 16:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/20 16:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/20 16:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/20 16:33	1
2-Hexanone	ND		25	3.1	ug/L			01/19/20 16:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/20 16:33	1
Methylene bromide	ND		5.0	0.59	ug/L			01/19/20 16:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/20 16:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/20 16:33	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/19/20 16:33	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/19/20 16:33	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/20 16:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/20 16:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/20 16:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/20 16:33	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/20 16:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/20 16:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/20 16:33	1

Client Sample ID: ROST4PZG-ROX-011320
Date Collected: 01/13/20 11:15
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/20 16:33	1
Styrene	ND		1.0	1.0	ug/L			01/19/20 16:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/20 16:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/19/20 16:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/19/20 16:33	1
Toluene	4.1		1.0	0.41	ug/L			01/19/20 16:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 16:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/19/20 16:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/20 16:33	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/19/20 16:33	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/19/20 16:33	1
Trichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/20 16:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/20 16:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/20 16:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/20 16:33	1
Vinyl acetate	ND		25	2.0	ug/L			01/19/20 16:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/20 16:33	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/20 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*01/19/20 16:33*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*01/19/20 16:33*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/19/20 16:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/17/20 14:54	01/22/20 22:56	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/20 14:54	01/22/20 22:56	1
Anthracene	ND		0.19	0.030	ug/L		01/17/20 14:54	01/22/20 22:56	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/20 14:54	01/22/20 22:56	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/20 14:54	01/22/20 22:56	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		01/17/20 14:54	01/22/20 22:56	1
Benzo[g,h,i]perylene	ND	UJ	0.19	0.12	ug/L		01/17/20 14:54	01/22/20 22:56	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/17/20 14:54	01/22/20 22:56	1
Chrysene	ND		0.19	0.071	ug/L		01/17/20 14:54	01/22/20 22:56	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		01/17/20 14:54	01/22/20 22:56	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/20 14:54	01/22/20 22:56	1
Fluorene	ND		0.19	0.10	ug/L		01/17/20 14:54	01/22/20 22:56	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.11	ug/L		01/17/20 14:54	01/22/20 22:56	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/20 14:54	01/22/20 22:56	1
Pyrene	ND		0.19	0.038	ug/L		01/17/20 14:54	01/22/20 22:56	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/17/20 14:54	01/22/20 22:56	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/17/20 14:54	01/22/20 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*33 - 138*	*01/17/20 14:54*	*01/22/20 22:56*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*01/17/20 14:54*	*01/22/20 22:56*	*1*

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

Job ID: 400-182619-1

Client Sample ID: ROST4PZG-ROX-011320
Date Collected: 01/13/20 11:15
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-3
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	01/17/20 14:54	01/22/20 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/17/20 14:54	01/22/20 20:33	1
Benzenethiol	ND	• us	9.5	1.6	ug/L		01/17/20 14:54	01/22/20 20:33	1
Benzoic acid	ND		29	7.0	ug/L		01/17/20 14:54	01/22/20 20:33	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/17/20 14:54	01/22/20 20:33	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		01/17/20 14:54	01/22/20 20:33	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		01/17/20 14:54	01/22/20 20:33	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		01/17/20 14:54	01/22/20 20:33	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		01/17/20 14:54	01/22/20 20:33	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		01/17/20 14:54	01/22/20 20:33	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		01/17/20 14:54	01/22/20 20:33	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/17/20 14:54	01/22/20 20:33	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/17/20 14:54	01/22/20 20:33	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		01/17/20 14:54	01/22/20 20:33	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/17/20 14:54	01/22/20 20:33	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/17/20 14:54	01/22/20 20:33	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		01/17/20 14:54	01/22/20 20:33	1
Dibenzofuran	ND		9.5	0.50	ug/L		01/17/20 14:54	01/22/20 20:33	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/17/20 14:54	01/22/20 20:33	1
Diethyl phthalate	ND		9.5	0.67	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/17/20 14:54	01/22/20 20:33	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		01/17/20 14:54	01/22/20 20:33	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/17/20 14:54	01/22/20 20:33	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/20 14:54	01/22/20 20:33	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		01/17/20 14:54	01/22/20 20:33	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/17/20 14:54	01/22/20 20:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/17/20 14:54	01/22/20 20:33	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		01/17/20 14:54	01/22/20 20:33	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/20 14:54	01/22/20 20:33	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/17/20 14:54	01/22/20 20:33	1
Indene	ND		9.5	0.95	ug/L		01/17/20 14:54	01/22/20 20:33	1
Isophorone	ND		9.5	0.54	ug/L		01/17/20 14:54	01/22/20 20:33	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/17/20 14:54	01/22/20 20:33	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/17/20 14:54	01/22/20 20:33	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/17/20 14:54	01/22/20 20:33	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/17/20 14:54	01/22/20 20:33	1
4-Nitroaniline	ND		9.5	2.4	ug/L		01/17/20 14:54	01/22/20 20:33	1
Nitrobenzene	ND		9.5	0.52	ug/L		01/17/20 14:54	01/22/20 20:33	1
2-Nitrophenol	ND		9.5	0.62	ug/L		01/17/20 14:54	01/22/20 20:33	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/17/20 14:54	01/22/20 20:33	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/17/20 14:54	01/22/20 20:33	1

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

Job ID: 400-182619-1

Client Sample ID: ROST4PZG-ROX-011320
Date Collected: 01/13/20 11:15
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/17/20 14:54	01/22/20 20:33	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		01/17/20 14:54	01/22/20 20:33	1
Phenol	ND		9.5	2.5	ug/L		01/17/20 14:54	01/22/20 20:33	1
Pyridine	ND		9.5	3.1	ug/L		01/17/20 14:54	01/22/20 20:33	1
Quinoline	ND		9.5	5.7	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/17/20 14:54	01/22/20 20:33	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/17/20 14:54	01/22/20 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*01/17/20 14:54*	*01/22/20 20:33*	*1*
2-Fluorophenol	*14*		*10 - 120*	*01/17/20 14:54*	*01/22/20 20:33*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*01/17/20 14:54*	*01/22/20 20:33*	*1*
Phenol-d5	*36*		*10 - 120*	*01/17/20 14:54*	*01/22/20 20:33*	*1*
Terphenyl-d14	*88*		*53 - 125*	*01/17/20 14:54*	*01/22/20 20:33*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*01/17/20 14:54*	*01/22/20 20:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		01/17/20 14:54	02/06/20 12:13	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.030	0.0056	ug/L		01/21/20 12:12	01/21/20 22:03	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		01/21/20 12:12	01/21/20 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*01/21/20 12:12*	*01/21/20 22:03*	*1*

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

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/20 16:58	1
Acrolein	ND		20	10	ug/L			01/19/20 16:58	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/20 16:58	1
Benzene	ND		1.0	0.38	ug/L			01/19/20 16:58	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/20 16:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/19/20 16:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Bromoform	ND		5.0	0.71	ug/L			01/19/20 16:58	1
Bromomethane	ND		1.0	0.98	ug/L			01/19/20 16:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/20 16:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/20 16:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/20 16:58	1
Chloroform	ND		1.0	0.60	ug/L			01/19/20 16:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/19/20 16:58	1
Chloromethane	ND		1.0	0.83	ug/L			01/19/20 16:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 16:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/20 16:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/20 16:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/20 16:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/20 16:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/20 16:58	1
2-Hexanone	ND		25	3.1	ug/L			01/19/20 16:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/20 16:58	1
Methylene bromide	ND		5.0	0.59	ug/L			01/19/20 16:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/20 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/20 16:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/19/20 16:58	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/19/20 16:58	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/20 16:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/20 16:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/20 16:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/20 16:58	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/20 16:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/20 16:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/20 16:58	1

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

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/20 16:58	1
Styrene	ND		1.0	1.0	ug/L			01/19/20 16:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/20 16:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/19/20 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/19/20 16:58	1
Toluene	ND		1.0	0.41	ug/L			01/19/20 16:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 16:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/19/20 16:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/20 16:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/19/20 16:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/19/20 16:58	1
Trichloroethene	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/20 16:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/20 16:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/20 16:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/20 16:58	1
Vinyl acetate	ND		25	2.0	ug/L			01/19/20 16:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/20 16:58	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/20 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*01/19/20 16:58*	*1*
Dibromofluoromethane	*88*		*81 - 121*		*01/19/20 16:58*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*01/19/20 16:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/17/20 14:54	01/22/20 21:23	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/20 14:54	01/22/20 21:23	1
Anthracene	ND		0.19	0.030	ug/L		01/17/20 14:54	01/22/20 21:23	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/20 14:54	01/22/20 21:23	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/20 14:54	01/22/20 21:23	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		01/17/20 14:54	01/22/20 21:23	1
Benzo[g,h,i]perylene	ND	U	0.19	0.12	ug/L		01/17/20 14:54	01/22/20 21:23	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/20 14:54	01/22/20 21:23	1
Chrysene	ND		0.19	0.071	ug/L		01/17/20 14:54	01/22/20 21:23	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		01/17/20 14:54	01/22/20 21:23	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/20 14:54	01/22/20 21:23	1
Fluorene	ND		0.19	0.11	ug/L		01/17/20 14:54	01/22/20 21:23	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.11	ug/L		01/17/20 14:54	01/22/20 21:23	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/20 14:54	01/22/20 21:23	1
Pyrene	ND		0.19	0.038	ug/L		01/17/20 14:54	01/22/20 21:23	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/17/20 14:54	01/22/20 21:23	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/17/20 14:54	01/22/20 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*112*		*33 - 138*	*01/17/20 14:54*	*01/22/20 21:23*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*01/17/20 14:54*	*01/22/20 21:23*	*1*

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

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*60*		*19 - 130*	*01/17/20 14:54*	*01/22/20 21:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/17/20 14:54	01/22/20 22:18	1
Benzenethiol	ND		9.6	1.6	ug/L		01/17/20 14:54	01/22/20 22:18	1
Benzoic acid	ND		29	7.0	ug/L		01/17/20 14:54	01/22/20 22:18	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/20 14:54	01/22/20 22:18	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		01/17/20 14:54	01/22/20 22:18	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		01/17/20 14:54	01/22/20 22:18	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		01/17/20 14:54	01/22/20 22:18	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/20 14:54	01/22/20 22:18	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		01/17/20 14:54	01/22/20 22:18	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		01/17/20 14:54	01/22/20 22:18	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/20 14:54	01/22/20 22:18	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/17/20 14:54	01/22/20 22:18	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		01/17/20 14:54	01/22/20 22:18	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/20 14:54	01/22/20 22:18	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/20 14:54	01/22/20 22:18	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		01/17/20 14:54	01/22/20 22:18	1
Dibenzofuran	ND		9.6	0.50	ug/L		01/17/20 14:54	01/22/20 22:18	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/17/20 14:54	01/22/20 22:18	1
Diethyl phthalate	ND		9.6	0.67	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/17/20 14:54	01/22/20 22:18	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		01/17/20 14:54	01/22/20 22:18	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/20 14:54	01/22/20 22:18	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/20 14:54	01/22/20 22:18	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		01/17/20 14:54	01/22/20 22:18	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/20 14:54	01/22/20 22:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/20 14:54	01/22/20 22:18	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		01/17/20 14:54	01/22/20 22:18	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/20 14:54	01/22/20 22:18	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/20 14:54	01/22/20 22:18	1
Indene	ND		9.6	0.96	ug/L		01/17/20 14:54	01/22/20 22:18	1
Isophorone	ND		9.6	0.55	ug/L		01/17/20 14:54	01/22/20 22:18	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/20 14:54	01/22/20 22:18	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/17/20 14:54	01/22/20 22:18	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/20 14:54	01/22/20 22:18	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/20 14:54	01/22/20 22:18	1
4-Nitroaniline	ND		9.6	2.4	ug/L		01/17/20 14:54	01/22/20 22:18	1
Nitrobenzene	ND		9.6	0.53	ug/L		01/17/20 14:54	01/22/20 22:18	1
2-Nitrophenol	ND		9.6	0.62	ug/L		01/17/20 14:54	01/22/20 22:18	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/20 14:54	01/22/20 22:18	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/17/20 14:54	01/22/20 22:18	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/20 14:54	01/22/20 22:18	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		01/17/20 14:54	01/22/20 22:18	1
Pentachlorophenol	ND		19	1.7	ug/L		01/17/20 14:54	01/22/20 22:18	1
Phenol	ND		9.6	2.5	ug/L		01/17/20 14:54	01/22/20 22:18	1
Pyridine	ND		9.6	3.1	ug/L		01/17/20 14:54	01/22/20 22:18	1
Quinoline	ND		9.6	5.7	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/17/20 14:54	01/22/20 22:18	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/17/20 14:54	01/22/20 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 120*	*01/17/20 14:54*	*01/22/20 22:18*	*1*
2-Fluorophenol	*18*		*10 - 120*	*01/17/20 14:54*	*01/22/20 22:18*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*01/17/20 14:54*	*01/22/20 22:18*	*1*
Phenol-d5	*41*		*10 - 120*	*01/17/20 14:54*	*01/22/20 22:18*	*1*
Terphenyl-d14	*88*		*53 - 125*	*01/17/20 14:54*	*01/22/20 22:18*	*1*
2,4,6-Tribromophenol	*50*		*15 - 135*	*01/17/20 14:54*	*01/22/20 22:18*	*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		01/21/20 12:12	01/21/20 22:23	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		01/21/20 12:12	01/21/20 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*01/21/20 12:12*	*01/21/20 22:23*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320-DUP
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/20 17:24	1
Acrolein	ND		20	10	ug/L			01/19/20 17:24	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/20 17:24	1
Benzene	ND		1.0	0.38	ug/L			01/19/20 17:24	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/20 17:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/19/20 17:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Bromoform	ND		5.0	0.71	ug/L			01/19/20 17:24	1
Bromomethane	ND		1.0	0.98	ug/L			01/19/20 17:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/20 17:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/20 17:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/20 17:24	1
Chloroform	ND		1.0	0.60	ug/L			01/19/20 17:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/19/20 17:24	1
Chloromethane	ND		1.0	0.83	ug/L			01/19/20 17:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 17:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/20 17:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/20 17:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/20 17:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/20 17:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/20 17:24	1
2-Hexanone	ND		25	3.1	ug/L			01/19/20 17:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/20 17:24	1
Methylene bromide	ND		5.0	0.59	ug/L			01/19/20 17:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/20 17:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/20 17:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/19/20 17:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/19/20 17:24	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/20 17:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/20 17:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/20 17:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/20 17:24	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/20 17:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/20 17:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/20 17:24	1

Client Sample ID: MW9-ROX-011320-DUP
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/20 17:24	1
Styrene	ND		1.0	1.0	ug/L			01/19/20 17:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/20 17:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/19/20 17:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/19/20 17:24	1
Toluene	ND		1.0	0.41	ug/L			01/19/20 17:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 17:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/19/20 17:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/20 17:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/19/20 17:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/19/20 17:24	1
Trichloroethene	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/20 17:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/20 17:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/20 17:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/20 17:24	1
Vinyl acetate	ND		25	2.0	ug/L			01/19/20 17:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/20 17:24	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/20 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*01/19/20 17:24*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*01/19/20 17:24*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*01/19/20 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		01/17/20 14:54	01/22/20 23:14	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/20 14:54	01/22/20 23:14	1
Anthracene	ND		0.19	0.030	ug/L		01/17/20 14:54	01/22/20 23:14	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/20 14:54	01/22/20 23:14	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/20 14:54	01/22/20 23:14	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		01/17/20 14:54	01/22/20 23:14	1
Benzo[g,h,i]perylene	ND	uJ	0.19	0.12	ug/L		01/17/20 14:54	01/22/20 23:14	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/17/20 14:54	01/22/20 23:14	1
Chrysene	ND		0.19	0.071	ug/L		01/17/20 14:54	01/22/20 23:14	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		01/17/20 14:54	01/22/20 23:14	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/20 14:54	01/22/20 23:14	1
Fluorene	ND		0.19	0.10	ug/L		01/17/20 14:54	01/22/20 23:14	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.11	ug/L		01/17/20 14:54	01/22/20 23:14	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/20 14:54	01/22/20 23:14	1
Pyrene	ND		0.19	0.038	ug/L		01/17/20 14:54	01/22/20 23:14	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/17/20 14:54	01/22/20 23:14	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/17/20 14:54	01/22/20 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*110*		*33 - 138*	*01/17/20 14:54*	*01/22/20 23:14*	*1*
2-Fluorobiphenyl	*101*		*15 - 122*	*01/17/20 14:54*	*01/22/20 23:14*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320-DUP
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*19 - 130*	*01/17/20 14:54*	*01/22/20 23:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/17/20 14:54	01/22/20 20:54	1
Benzenethiol	ND	* u5	9.5	1.6	ug/L		01/17/20 14:54	01/22/20 20:54	1
Benzoic acid	ND		29	7.0	ug/L		01/17/20 14:54	01/22/20 20:54	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/17/20 14:54	01/22/20 20:54	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		01/17/20 14:54	01/22/20 20:54	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		01/17/20 14:54	01/22/20 20:54	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		01/17/20 14:54	01/22/20 20:54	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		01/17/20 14:54	01/22/20 20:54	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		01/17/20 14:54	01/22/20 20:54	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		01/17/20 14:54	01/22/20 20:54	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/17/20 14:54	01/22/20 20:54	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/17/20 14:54	01/22/20 20:54	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		01/17/20 14:54	01/22/20 20:54	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/17/20 14:54	01/22/20 20:54	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/17/20 14:54	01/22/20 20:54	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		01/17/20 14:54	01/22/20 20:54	1
Dibenzofuran	ND		9.5	0.50	ug/L		01/17/20 14:54	01/22/20 20:54	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/17/20 14:54	01/22/20 20:54	1
Diethyl phthalate	ND		9.5	0.67	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/17/20 14:54	01/22/20 20:54	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		01/17/20 14:54	01/22/20 20:54	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/17/20 14:54	01/22/20 20:54	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/20 14:54	01/22/20 20:54	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		01/17/20 14:54	01/22/20 20:54	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/17/20 14:54	01/22/20 20:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/17/20 14:54	01/22/20 20:54	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		01/17/20 14:54	01/22/20 20:54	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/20 14:54	01/22/20 20:54	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/17/20 14:54	01/22/20 20:54	1
Indene	ND		9.5	0.95	ug/L		01/17/20 14:54	01/22/20 20:54	1
Isophorone	ND		9.5	0.54	ug/L		01/17/20 14:54	01/22/20 20:54	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/17/20 14:54	01/22/20 20:54	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		01/17/20 14:54	01/22/20 20:54	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/17/20 14:54	01/22/20 20:54	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/17/20 14:54	01/22/20 20:54	1
4-Nitroaniline	ND		9.5	2.4	ug/L		01/17/20 14:54	01/22/20 20:54	1
Nitrobenzene	ND		9.5	0.52	ug/L		01/17/20 14:54	01/22/20 20:54	1
2-Nitrophenol	ND		9.5	0.62	ug/L		01/17/20 14:54	01/22/20 20:54	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/17/20 14:54	01/22/20 20:54	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/17/20 14:54	01/22/20 20:54	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

Client Sample ID: MW9-ROX-011320-DUP
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-5
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		9.5	3.1	ug/L		01/17/20 14:54	01/22/20 20:54	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		01/17/20 14:54	01/22/20 20:54	1
Pentachlorophenol	ND		19	1.7	ug/L		01/17/20 14:54	01/22/20 20:54	1
Phenol	ND		9.5	2.5	ug/L		01/17/20 14:54	01/22/20 20:54	1
Pyridine	ND		9.5	3.1	ug/L		01/17/20 14:54	01/22/20 20:54	1
Quinoline	ND		9.5	5.7	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/17/20 14:54	01/22/20 20:54	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/17/20 14:54	01/22/20 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*01/17/20 14:54*	*01/22/20 20:54*	*1*
2-Fluorophenol	*16*		*10 - 120*	*01/17/20 14:54*	*01/22/20 20:54*	*1*
Nitrobenzene-d5	*75*		*27 - 120*	*01/17/20 14:54*	*01/22/20 20:54*	*1*
Phenol-d5	*46*		*10 - 120*	*01/17/20 14:54*	*01/22/20 20:54*	*1*
Terphenyl-d14	*93*		*53 - 125*	*01/17/20 14:54*	*01/22/20 20:54*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*01/17/20 14:54*	*01/22/20 20:54*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.030	0.0056	ug/L		01/21/20 12:12	01/21/20 22:42	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		01/21/20 12:12	01/21/20 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*51 - 149*	*01/21/20 12:12*	*01/21/20 22:42*	*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.
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.

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: 400-182619-1

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)
400-182619-1	TB-ROX-011320-8260-A	97	89	102
400-182619-3	ROST4PZG-ROX-011320	99	96	101
400-182619-4	MW9-ROX-011320	97	88	103
400-182619-5	MW9-ROX-011320-DUP	96	94	102
LCS 400-474643/1002	Lab Control Sample	96	98	104
MB 400-474643/4	Method Blank	97	87	105

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)
400-182619-3	ROST4PZG-ROX-011320	72	14	73	36	88	84
400-182619-4	MW9-ROX-011320	67	18	68	41	88	50
400-182619-5	MW9-ROX-011320-DUP	75	16	75	46	93	69
LCS 400-474533/2-A	Lab Control Sample	62	33	81	61	76	66
LCS 400-474533/4-A	Lab Control Sample	57	10	58	36	72	44
LCSD 400-474533/3-A	Lab Control Sample Dup	61	32	78	58	74	61
LCSD 400-474533/5-A	Lab Control Sample Dup	81	51	78	63	104	69
MB 400-474533/1-A	Method Blank	85	30	83	63	115	86

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)
400-182619-3	ROST4PZG-ROX-011320	100	73	62
400-182619-4	MW9-ROX-011320	112	73	60
400-182619-5	MW9-ROX-011320-DUP	110	101	78
LCS 400-474533/2-A	Lab Control Sample	99	77	70
LCSD 400-474533/3-A	Lab Control Sample Dup	99	73	61
MB 400-474533/1-A	Method Blank	128	95	75

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: 400-182619-1

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)
400-182619-2	TB-ROX-011320-8011-A	119
400-182619-3	ROST4PZG-ROX-011320	113
400-182619-4	MW9-ROX-011320	109
400-182619-5	MW9-ROX-011320-DUP	111
LCS 400-474833/2-A	Lab Control Sample	124
LCSD 400-474833/3-A	Lab Control Sample Dup	144
MB 400-474833/1-A	Method Blank	118

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

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: 400-182619-1

Client Sample ID: TB-ROX-011320-8260-A

Lab Sample ID: 400-182619-1
Matrix: Water

Date Collected: 01/13/20 00:00
Date Received: 01/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	474643	01/19/20 15:41	RS	TAL PEN

Client Sample ID: TB-ROX-011320-8011-A

Lab Sample ID: 400-182619-2
Matrix: Water

Date Collected: 01/13/20 00:00
Date Received: 01/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.3 mL	35 mL	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 21:44	DS	TAL PEN

Client Sample ID: ROST4PZG-ROX-011320

Lab Sample ID: 400-182619-3
Matrix: Water

Date Collected: 01/13/20 11:15
Date Received: 01/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	474643	01/19/20 16:33	RS	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D		1			474976	01/22/20 20:33	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1048.2 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D	RA	1			476857	02/06/20 12:13	VC1	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			475004	01/22/20 22:56	PP1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 22:03	DS	TAL PEN

Client Sample ID: MW9-ROX-011320

Lab Sample ID: 400-182619-4
Matrix: Water

Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	474643	01/19/20 16:58	RS	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D		1			474976	01/22/20 22:18	VC1	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			475004	01/22/20 21:23	PP1	TAL PEN
Total/NA	Prep	8011			35.6 mL	35 mL	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 22:23	DS	TAL PEN

Client Sample ID: MW9-ROX-011320-DUP

Lab Sample ID: 400-182619-5
Matrix: Water

Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	474643	01/19/20 17:24	RS	TAL PEN

Client Sample ID: MW9-ROX-011320-DUP
Date Collected: 01/13/20 12:25
Date Received: 01/15/20 10:10

Lab Sample ID: 400-182619-5
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			1048 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D		1			474976	01/22/20 20:54	VC1	TAL PEN
Total/NA	Prep	3520C			1048 mL	1 mL	474533	01/17/20 14:54	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			475004	01/22/20 23:14	PP1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 22:42	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-474533/1-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	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D		1			474976	01/22/20 18:26	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			475004	01/22/20 20:27	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-474643/4
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	474643	01/19/20 13:07	RS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-474833/1-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	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 20:26	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-474533/2-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	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D		1			475135	01/23/20 13:52	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			475004	01/22/20 20:46	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-474533/4-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	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D		1			474976	01/22/20 19:29	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-474643/1002

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	474643	01/19/20 12:03	RS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-474833/2-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	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 20:46	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-474533/3-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	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D		1			475135	01/23/20 14:12	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			475004	01/22/20 21:04	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-474533/5-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	474533	01/17/20 14:53	JRW	TAL PEN
Total/NA	Analysis	8270D		1			474976	01/22/20 19:50	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-474833/3-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	474833	01/21/20 12:12	DS	TAL PEN
Total/NA	Analysis	8011		1			474884	01/21/20 21:05	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: 474643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-1	TB-ROX-011320-8260-A	Total/NA	Water	8260B	
400-182619-3	ROST4PZG-ROX-011320	Total/NA	Water	8260B	
400-182619-4	MW9-ROX-011320	Total/NA	Water	8260B	
400-182619-5	MW9-ROX-011320-DUP	Total/NA	Water	8260B	
MB 400-474643/4	Method Blank	Total/NA	Water	8260B	
LCS 400-474643/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 474533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-3	ROST4PZG-ROX-011320	Total/NA	Water	3520C	
400-182619-3 - RA	ROST4PZG-ROX-011320	Total/NA	Water	3520C	
400-182619-4	MW9-ROX-011320	Total/NA	Water	3520C	
400-182619-5	MW9-ROX-011320-DUP	Total/NA	Water	3520C	
MB 400-474533/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-474533/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-474533/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-474533/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-474533/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 474976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-3	ROST4PZG-ROX-011320	Total/NA	Water	8270D	474533
400-182619-4	MW9-ROX-011320	Total/NA	Water	8270D	474533
400-182619-5	MW9-ROX-011320-DUP	Total/NA	Water	8270D	474533
MB 400-474533/1-A	Method Blank	Total/NA	Water	8270D	474533
LCS 400-474533/4-A	Lab Control Sample	Total/NA	Water	8270D	474533
LCSD 400-474533/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	474533

Analysis Batch: 475004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-3	ROST4PZG-ROX-011320	Total/NA	Water	8270D LL	474533
400-182619-4	MW9-ROX-011320	Total/NA	Water	8270D LL	474533
400-182619-5	MW9-ROX-011320-DUP	Total/NA	Water	8270D LL	474533
MB 400-474533/1-A	Method Blank	Total/NA	Water	8270D LL	474533
LCS 400-474533/2-A	Lab Control Sample	Total/NA	Water	8270D LL	474533
LCSD 400-474533/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	474533

Analysis Batch: 475135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-474533/2-A	Lab Control Sample	Total/NA	Water	8270D	474533
LCSD 400-474533/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	474533

Analysis Batch: 476857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-3 - RA	ROST4PZG-ROX-011320	Total/NA	Water	8270D	474533

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-182619-1

GC Semi VOA

Prep Batch: 474833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-2	TB-ROX-011320-8011-A	Total/NA	Water	8011	
400-182619-3	ROST4PZG-ROX-011320	Total/NA	Water	8011	
400-182619-4	MW9-ROX-011320	Total/NA	Water	8011	
400-182619-5	MW9-ROX-011320-DUP	Total/NA	Water	8011	
MB 400-474833/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-474833/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-474833/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 474884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182619-2	TB-ROX-011320-8011-A	Total/NA	Water	8011	474833
400-182619-3	ROST4PZG-ROX-011320	Total/NA	Water	8011	474833
400-182619-4	MW9-ROX-011320	Total/NA	Water	8011	474833
400-182619-5	MW9-ROX-011320-DUP	Total/NA	Water	8011	474833
MB 400-474833/1-A	Method Blank	Total/NA	Water	8011	474833
LCS 400-474833/2-A	Lab Control Sample	Total/NA	Water	8011	474833
LCSD 400-474833/3-A	Lab Control Sample Dup	Total/NA	Water	8011	474833

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-474643/4
Matrix: Water
Analysis Batch: 474643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/20 13:07	1
Acrolein	ND		20	10	ug/L			01/19/20 13:07	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/20 13:07	1
Benzene	ND		1.0	0.38	ug/L			01/19/20 13:07	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/20 13:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			01/19/20 13:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Bromoform	ND		5.0	0.71	ug/L			01/19/20 13:07	1
Bromomethane	ND		1.0	0.98	ug/L			01/19/20 13:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/20 13:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Dibromochloromethane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/20 13:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/20 13:07	1
Chloroform	ND		1.0	0.60	ug/L			01/19/20 13:07	1
1-Chlorohexane	ND		1.0	0.70	ug/L			01/19/20 13:07	1
Chloromethane	ND		1.0	0.83	ug/L			01/19/20 13:07	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 13:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/20 13:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/20 13:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/20 13:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/20 13:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/20 13:07	1
2-Hexanone	ND		25	3.1	ug/L			01/19/20 13:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/20 13:07	1
Methylene bromide	ND		5.0	0.59	ug/L			01/19/20 13:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/20 13:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/20 13:07	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			01/19/20 13:07	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			01/19/20 13:07	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/20 13:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/20 13:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/20 13:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/20 13:07	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/20 13:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/20 13:07	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-474643/4
Matrix: Water
Analysis Batch: 474643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/20 13:07	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/20 13:07	1
Styrene	ND		1.0	1.0	ug/L			01/19/20 13:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/20 13:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			01/19/20 13:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Tetrachloroethene	ND		1.0	0.58	ug/L			01/19/20 13:07	1
Toluene	ND		1.0	0.41	ug/L			01/19/20 13:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/20 13:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			01/19/20 13:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/20 13:07	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			01/19/20 13:07	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			01/19/20 13:07	1
Trichloroethene	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/20 13:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/20 13:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/20 13:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/20 13:07	1
Vinyl acetate	ND		25	2.0	ug/L			01/19/20 13:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/20 13:07	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/20 13:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*01/19/20 13:07*	*1*
Dibromofluoromethane	*87*		*81 - 121*		*01/19/20 13:07*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*01/19/20 13:07*	*1*

Lab Sample ID: LCS 400-474643/1002
Matrix: Water
Analysis Batch: 474643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	157		ug/L		78	43 - 160
Acrolein	500	421		ug/L		84	38 - 160
Acrylonitrile	500	435		ug/L		87	64 - 142
Benzene	50.0	43.0		ug/L		86	70 - 130
Bromobenzene	50.0	51.5		ug/L		103	70 - 132
Bromochloromethane	50.0	51.7		ug/L		103	70 - 130
Bromodichloromethane	50.0	40.7		ug/L		81	67 - 133
Bromoform	50.0	43.4		ug/L		87	57 - 140
Bromomethane	50.0	49.2		ug/L		98	10 - 160
2-Butanone (MEK)	200	171		ug/L		86	61 - 145
Carbon disulfide	50.0	46.2		ug/L		92	61 - 137
Carbon tetrachloride	50.0	43.0		ug/L		86	61 - 137
Chlorobenzene	50.0	49.3		ug/L		99	70 - 130
Dibromochloromethane	50.0	44.8		ug/L		90	67 - 135
Chloroethane	50.0	53.9		ug/L		108	55 - 141

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-474643/1002
Matrix: Water
Analysis Batch: 474643

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	43.6		ug/L		87	10 - 160
Chloroform	50.0	46.3		ug/L		93	69 - 130
1-Chlorohexane	50.0	47.7		ug/L		95	69 - 130
Chloromethane	50.0	37.3		ug/L		75	58 - 137
cis-1,2-Dichloroethene	50.0	44.9		ug/L		90	68 - 130
cis-1,3-Dichloropropene	50.0	42.0		ug/L		84	69 - 132
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	51.1		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	50.5		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	45.3		ug/L		91	41 - 146
1,1-Dichloroethane	50.0	40.4		ug/L		81	70 - 130
1,2-Dichloroethane	50.0	41.4		ug/L		83	69 - 130
1,1-Dichloroethene	50.0	48.3		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	42.3		ug/L		85	70 - 130
1,3-Dichloropropane	50.0	46.9		ug/L		94	70 - 130
2,2-Dichloropropane	50.0	42.8		ug/L		86	52 - 135
1,1-Dichloropropene	50.0	43.5		ug/L		87	70 - 130
Ethylbenzene	50.0	48.6		ug/L		97	70 - 130
Ethyl methacrylate	50.0	42.1		ug/L		84	68 - 130
Hexachlorobutadiene	50.0	48.9		ug/L		98	53 - 140
2-Hexanone	200	165		ug/L		83	65 - 137
Isopropylbenzene	50.0	49.5		ug/L		99	70 - 130
Methylene bromide	50.0	42.8		ug/L		86	70 - 130
Methylene Chloride	50.0	45.3		ug/L		91	66 - 135
4-Methyl-2-pentanone (MIBK)	200	158		ug/L		79	69 - 138
Methyl tert-butyl ether	50.0	42.9		ug/L		86	66 - 130
m-Xylene & p-Xylene	50.0	47.6		ug/L		95	70 - 130
Naphthalene	50.0	45.5		ug/L		91	47 - 149
n-Butylbenzene	50.0	47.8		ug/L		96	67 - 130
N-Propylbenzene	50.0	49.7		ug/L		99	70 - 130
o-Chlorotoluene	50.0	46.0		ug/L		92	70 - 130
o-Xylene	50.0	48.1		ug/L		96	70 - 130
p-Chlorotoluene	50.0	49.9		ug/L		100	70 - 130
p-Isopropyltoluene	50.0	49.8		ug/L		100	65 - 130
sec-Butylbenzene	50.0	50.9		ug/L		102	66 - 130
Styrene	50.0	46.1		ug/L		92	70 - 130
tert-Butylbenzene	50.0	56.0		ug/L		112	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.0		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/L		95	70 - 131
Tetrachloroethene	50.0	47.4		ug/L		95	65 - 130
Toluene	50.0	45.7		ug/L		91	70 - 130
trans-1,2-Dichloroethene	50.0	46.3		ug/L		93	70 - 130
trans-1,3-Dichloropropene	50.0	44.0		ug/L		88	63 - 130
1,2,3-Trichlorobenzene	50.0	47.7		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	48.9		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	43.7		ug/L		87	68 - 130
1,1,2-Trichloroethane	50.0	44.7		ug/L		89	70 - 130
Trichloroethene	50.0	43.2		ug/L		86	70 - 130
Trichlorofluoromethane	50.0	41.4		ug/L		83	65 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-474643/1002
Matrix: Water
Analysis Batch: 474643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	47.6		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	50.0	49.1		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	50.0	50.0		ug/L		100	69 - 130
Vinyl acetate	100	87.0		ug/L		87	26 - 160
Vinyl chloride	50.0	49.3		ug/L		99	59 - 136
Xylenes, Total	100	95.7		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-474533/1-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474533

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/17/20 14:53	01/22/20 18:26	1
Benzenethiol	ND		10	1.7	ug/L		01/17/20 14:53	01/22/20 18:26	1
Benzoic acid	ND		30	7.3	ug/L		01/17/20 14:53	01/22/20 18:26	1
Benzyl alcohol	ND		10	2.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		01/17/20 14:53	01/22/20 18:26	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		01/17/20 14:53	01/22/20 18:26	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		01/17/20 14:53	01/22/20 18:26	1
Bis(2-ethylhexyl) phthalate	27.6		10	5.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		01/17/20 14:53	01/22/20 18:26	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		01/17/20 14:53	01/22/20 18:26	1
4-Chloroaniline	ND		10	3.4	ug/L		01/17/20 14:53	01/22/20 18:26	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/17/20 14:53	01/22/20 18:26	1
2-Chloronaphthalene	ND		10	0.52	ug/L		01/17/20 14:53	01/22/20 18:26	1
2-Chlorophenol	ND		10	2.2	ug/L		01/17/20 14:53	01/22/20 18:26	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
Dibenzofuran	ND		10	0.52	ug/L		01/17/20 14:53	01/22/20 18:26	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
Diethyl phthalate	ND		10	0.70	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/17/20 14:53	01/22/20 18:26	1
Dimethyl phthalate	ND		10	0.60	ug/L		01/17/20 14:53	01/22/20 18:26	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/17/20 14:53	01/22/20 18:26	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/17/20 14:53	01/22/20 18:26	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		01/17/20 14:53	01/22/20 18:26	1
1,4-Dioxane	ND		10	1.0	ug/L		01/17/20 14:53	01/22/20 18:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-474533/1-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474533

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
Hexachlorobenzene	ND		10	0.25	ug/L		01/17/20 14:53	01/22/20 18:26	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/17/20 14:53	01/22/20 18:26	1
Hexachloroethane	ND		10	4.2	ug/L		01/17/20 14:53	01/22/20 18:26	1
Indene	ND		10	1.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
Isophorone	ND		10	0.57	ug/L		01/17/20 14:53	01/22/20 18:26	1
2-Methylphenol	ND		10	1.8	ug/L		01/17/20 14:53	01/22/20 18:26	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
2-Nitroaniline	ND		10	2.2	ug/L		01/17/20 14:53	01/22/20 18:26	1
3-Nitroaniline	ND		10	1.8	ug/L		01/17/20 14:53	01/22/20 18:26	1
4-Nitroaniline	ND		10	2.5	ug/L		01/17/20 14:53	01/22/20 18:26	1
Nitrobenzene	ND		10	0.55	ug/L		01/17/20 14:53	01/22/20 18:26	1
2-Nitrophenol	ND		10	0.65	ug/L		01/17/20 14:53	01/22/20 18:26	1
4-Nitrophenol	ND		10	2.1	ug/L		01/17/20 14:53	01/22/20 18:26	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/17/20 14:53	01/22/20 18:26	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/17/20 14:53	01/22/20 18:26	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		01/17/20 14:53	01/22/20 18:26	1
Pentachlorophenol	ND		20	1.8	ug/L		01/17/20 14:53	01/22/20 18:26	1
Phenol	ND		10	2.6	ug/L		01/17/20 14:53	01/22/20 18:26	1
Pyridine	ND		10	3.2	ug/L		01/17/20 14:53	01/22/20 18:26	1
Quinoline	ND		10	6.0	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/17/20 14:53	01/22/20 18:26	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/17/20 14:53	01/22/20 18:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*34 - 120*	*01/17/20 14:53*	*01/22/20 18:26*	*1*
2-Fluorophenol	*30*		*10 - 120*	*01/17/20 14:53*	*01/22/20 18:26*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*01/17/20 14:53*	*01/22/20 18:26*	*1*
Phenol-d5	*63*		*10 - 120*	*01/17/20 14:53*	*01/22/20 18:26*	*1*
Terphenyl-d14	*115*		*53 - 125*	*01/17/20 14:53*	*01/22/20 18:26*	*1*
2,4,6-Tribromophenol	*86*		*15 - 135*	*01/17/20 14:53*	*01/22/20 18:26*	*1*

Lab Sample ID: LCS 400-474533/2-A
Matrix: Water
Analysis Batch: 475135

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	17.5		ug/L		58	29 - 120
Benzoic acid	117	81.2		ug/L		70	10 - 150
Benzyl alcohol	30.0	24.8		ug/L		83	19 - 125
Bis(2-chloroethoxy)methane	30.0	19.5		ug/L		65	45 - 120
Bis(2-chloroethyl)ether	30.0	17.9		ug/L		60	48 - 120
bis (2-chloroisopropyl) ether	30.0	22.1		ug/L		74	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	24.3		ug/L		81	48 - 150
4-Bromophenyl phenyl ether	30.0	22.7		ug/L		76	55 - 122
Butyl benzyl phthalate	30.0	24.7		ug/L		82	46 - 145
4-Chloroaniline	30.0	19.3		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	20.4		ug/L		68	39 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-474533/2-A
Matrix: Water
Analysis Batch: 475135

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474533

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	18.4		ug/L		61	34 - 120
4-Chlorophenyl phenyl ether	30.0	20.0		ug/L		67	58 - 124
Dibenz[a,h]acridine	30.0	18.5		ug/L		62	46 - 149
Dibenzofuran	30.0	19.7		ug/L		66	58 - 123
3,3'-Dichlorobenzidine	60.0	75.6		ug/L		126	39 - 135
2,4-Dichlorophenol	30.0	20.4		ug/L		68	39 - 128
Diethyl phthalate	30.0	24.9		ug/L		83	44 - 146
2,4-Dimethylphenol	30.0	23.4		ug/L		78	44 - 120
Dimethyl phthalate	30.0	22.1		ug/L		74	50 - 131
Di-n-butyl phthalate	30.0	23.6		ug/L		79	55 - 131
4,6-Dinitro-ortho-cresol	60.0	55.5		ug/L		93	10 - 150
2,4-Dinitrophenol	60.0	62.5		ug/L		104	10 - 150
2,4-Dinitrotoluene	30.0	21.1		ug/L		70	58 - 140
2,6-Dinitrotoluene	30.0	22.1		ug/L		74	57 - 130
Di-n-octyl phthalate	30.0	23.4		ug/L		78	50 - 150
1,4-Dioxane	30.0	13.6		ug/L		45	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.9		ug/L		86	47 - 123
Hexachlorobenzene	30.0	23.0		ug/L		77	52 - 131
Hexachlorocyclopentadiene	30.0	9.63	J	ug/L		32	10 - 129
Hexachloroethane	30.0	19.1		ug/L		64	20 - 120
Indene	30.0	18.5		ug/L		62	47 - 120
Isophorone	30.0	20.2		ug/L		67	49 - 120
2-Methylphenol	30.0	22.4		ug/L		75	39 - 123
3 & 4 Methylphenol	30.0	23.3		ug/L		78	38 - 121
2-Nitroaniline	30.0	26.8		ug/L		89	47 - 150
3-Nitroaniline	30.0	25.7		ug/L		86	34 - 132
4-Nitroaniline	30.0	30.1		ug/L		100	41 - 135
Nitrobenzene	30.0	21.7		ug/L		72	47 - 120
2-Nitrophenol	30.0	22.3		ug/L		74	28 - 136
4-Nitrophenol	60.0	64.5		ug/L		107	10 - 150
N-Nitrosodimethylamine	30.0	28.1		ug/L		94	22 - 148
N-Nitrosodi-n-propylamine	30.0	25.0		ug/L		83	44 - 120
N-Nitrosodiphenylamine	29.8	23.0		ug/L		77	56 - 120
Pentachlorophenol	60.0	35.3		ug/L		59	15 - 141
Phenol	30.0	18.3		ug/L		61	33 - 120
Pyridine	60.0	27.0		ug/L		45	26 - 120
Quinoline	30.0	19.2		ug/L		64	51 - 129
2,4,5-Trichlorophenol	30.0	22.5		ug/L		75	38 - 147
2,4,6-Trichlorophenol	30.0	22.2		ug/L		74	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*34 - 120*
2-Fluorophenol	*33*		*10 - 120*
Nitrobenzene-d5	*81*		*27 - 120*
Phenol-d5	*61*		*10 - 120*
Terphenyl-d14	*76*		*53 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-474533/2-A
Matrix: Water
Analysis Batch: 475135

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474533

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	66		15 - 135

Lab Sample ID: LCS 400-474533/4-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474533

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	57		34 - 120
2-Fluorophenol	10		10 - 120
Nitrobenzene-d5	58		27 - 120
Phenol-d5	36		10 - 120
Terphenyl-d14	72		53 - 125
2,4,6-Tribromophenol	44		15 - 135

Lab Sample ID: LCSD 400-474533/3-A
Matrix: Water
Analysis Batch: 475135

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	17.0		ug/L		57	29 - 120	3	30
Benzoic acid	117	80.3		ug/L		69	10 - 150	1	30
Benzyl alcohol	30.0	23.7		ug/L		79	19 - 125	5	30
Bis(2-chloroethoxy)methane	30.0	18.5		ug/L		62	45 - 120	5	30
Bis(2-chloroethyl)ether	30.0	17.1		ug/L		57	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	21.2		ug/L		71	30 - 125	4	30
Bis(2-ethylhexyl) phthalate	30.0	30.3		ug/L		101	48 - 150	22	30
4-Bromophenyl phenyl ether	30.0	21.1		ug/L		70	55 - 122	7	30
Butyl benzyl phthalate	30.0	23.9		ug/L		80	46 - 145	3	30
4-Chloroaniline	30.0	18.8		ug/L		63	30 - 120	3	30
4-Chloro-3-methylphenol	30.0	19.5		ug/L		65	39 - 140	5	30
2-Chloronaphthalene	30.0	18.7		ug/L		62	52 - 120	8	30
2-Chlorophenol	30.0	17.3		ug/L		58	34 - 120	6	30
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124	10	30
Dibenz[a,h]acridine	30.0	16.2		ug/L		54	46 - 149	13	30
Dibenzofuran	30.0	18.5		ug/L		62	58 - 123	6	30
3,3'-Dichlorobenzidine	60.0	69.6		ug/L		116	39 - 135	8	30
2,4-Dichlorophenol	30.0	19.6		ug/L		65	39 - 128	4	30
Diethyl phthalate	30.0	23.0		ug/L		77	44 - 146	8	30
2,4-Dimethylphenol	30.0	22.3		ug/L		74	44 - 120	5	30
Dimethyl phthalate	30.0	20.4		ug/L		68	50 - 131	8	30
Di-n-butyl phthalate	30.0	22.4		ug/L		75	55 - 131	5	30
4,6-Dinitro-ortho-cresol	60.0	51.7		ug/L		86	10 - 150	7	30
2,4-Dinitrophenol	60.0	57.8		ug/L		96	10 - 150	8	30
2,4-Dinitrotoluene	30.0	19.2		ug/L		64	58 - 140	9	30
2,6-Dinitrotoluene	30.0	20.2		ug/L		67	57 - 130	9	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-474533/3-A
Matrix: Water
Analysis Batch: 475135

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	22.5		ug/L		75	50 - 150	4	30
1,4-Dioxane	30.0	13.8		ug/L		46	25 - 120	1	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	24.7		ug/L		82	47 - 123	5	30
Hexachlorobenzene	30.0	21.4		ug/L		71	52 - 131	8	30
Hexachlorocyclopentadiene	30.0	10.3	J	ug/L		34	10 - 129	6	30
Hexachloroethane	30.0	18.0		ug/L		60	20 - 120	6	30
Indene	30.0	18.1		ug/L		60	47 - 120	2	30
Isophorone	30.0	19.2		ug/L		64	49 - 120	5	30
2-Methylphenol	30.0	21.4		ug/L		71	39 - 123	5	30
3 & 4 Methylphenol	30.0	22.1		ug/L		74	38 - 121	5	30
2-Nitroaniline	30.0	24.2		ug/L		81	47 - 150	10	30
3-Nitroaniline	30.0	22.8		ug/L		76	34 - 132	12	30
4-Nitroaniline	30.0	26.3		ug/L		88	41 - 135	14	30
Nitrobenzene	30.0	20.5		ug/L		68	47 - 120	6	30
2-Nitrophenol	30.0	21.0		ug/L		70	28 - 136	6	30
4-Nitrophenol	60.0	55.6		ug/L		93	10 - 150	15	30
N-Nitrosodimethylamine	30.0	26.9		ug/L		90	22 - 148	4	30
N-Nitrosodi-n-propylamine	30.0	24.0		ug/L		80	44 - 120	4	30
N-Nitrosodiphenylamine	29.8	21.8		ug/L		73	56 - 120	5	30
Pentachlorophenol	60.0	32.0		ug/L		53	15 - 141	10	30
Phenol	30.0	17.2		ug/L		57	33 - 120	6	30
Pyridine	60.0	25.7		ug/L		43	26 - 120	5	30
Quinoline	30.0	18.3		ug/L		61	51 - 129	5	30
2,4,5-Trichlorophenol	30.0	21.1		ug/L		70	38 - 147	6	30
2,4,6-Trichlorophenol	30.0	20.9		ug/L		70	36 - 139	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*32*		*10 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Phenol-d5	*58*		*10 - 120*
Terphenyl-d14	*74*		*53 - 125*
2,4,6-Tribromophenol	*61*		*15 - 135*

Lab Sample ID: LCSD 400-474533/5-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		5	10 - 120	30	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*34 - 120*
2-Fluorophenol	*51*		*10 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Phenol-d5	*63*		*10 - 120*
Terphenyl-d14	*104*		*53 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-474533/5-A
Matrix: Water
Analysis Batch: 474976

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474533

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	69		15 - 135

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-474533/1-A
Matrix: Water
Analysis Batch: 475004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474533

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/17/20 14:53	01/22/20 20:27	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/20 14:53	01/22/20 20:27	1
Anthracene	ND		0.20	0.031	ug/L		01/17/20 14:53	01/22/20 20:27	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/17/20 14:53	01/22/20 20:27	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/17/20 14:53	01/22/20 20:27	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		01/17/20 14:53	01/22/20 20:27	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/20 14:53	01/22/20 20:27	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/17/20 14:53	01/22/20 20:27	1
Chrysene	ND		0.20	0.074	ug/L		01/17/20 14:53	01/22/20 20:27	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		01/17/20 14:53	01/22/20 20:27	1
Fluoranthene	ND		0.20	0.068	ug/L		01/17/20 14:53	01/22/20 20:27	1
Fluorene	ND		0.20	0.11	ug/L		01/17/20 14:53	01/22/20 20:27	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		01/17/20 14:53	01/22/20 20:27	1
Phenanthrene	ND		0.20	0.036	ug/L		01/17/20 14:53	01/22/20 20:27	1
Pyrene	ND		0.20	0.040	ug/L		01/17/20 14:53	01/22/20 20:27	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/17/20 14:53	01/22/20 20:27	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/17/20 14:53	01/22/20 20:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	128		33 - 138	01/17/20 14:53	01/22/20 20:27	1
2-Fluorobiphenyl	95		15 - 122	01/17/20 14:53	01/22/20 20:27	1
Nitrobenzene-d5	75		19 - 130	01/17/20 14:53	01/22/20 20:27	1

Lab Sample ID: LCS 400-474533/2-A
Matrix: Water
Analysis Batch: 475004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.9		ug/L		83	41 - 120
Acenaphthylene	30.0	22.3		ug/L		74	44 - 120
Anthracene	30.0	21.1		ug/L		70	49 - 120
Benzo[a]anthracene	30.0	23.6		ug/L		79	61 - 135
Benzo[a]pyrene	30.0	23.3		ug/L		78	52 - 120
Benzo[b]fluoranthene	30.0	26.7		ug/L		89	53 - 134
Benzo[g,h,i]perylene	30.0	17.1		ug/L		57	47 - 133
Benzo[k]fluoranthene	30.0	25.7		ug/L		86	57 - 134
Chrysene	30.0	22.4		ug/L		75	55 - 122
Dibenz(a,h)anthracene	30.0	22.5		ug/L		75	48 - 146
Fluoranthene	30.0	22.5		ug/L		75	54 - 128

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-474533/2-A
Matrix: Water
Analysis Batch: 475004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	25.0		ug/L		83	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	21.2		ug/L		71	43 - 142
Phenanthrene	30.0	22.0		ug/L		73	48 - 120
Pyrene	30.0	22.6		ug/L		75	48 - 132
1-Methylnaphthalene	30.0	22.3		ug/L		74	41 - 120
2-Methylnaphthalene	30.0	21.3		ug/L		71	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*70*		*19 - 130*

Lab Sample ID: LCSD 400-474533/3-A
Matrix: Water
Analysis Batch: 475004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474533

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	21.1		ug/L		70	41 - 120	16	56
Acenaphthylene	30.0	19.4		ug/L		65	44 - 120	14	56
Anthracene	30.0	19.5		ug/L		65	49 - 120	7	51
Benzo[a]anthracene	30.0	20.7		ug/L		69	61 - 135	13	49
Benzo[a]pyrene	30.0	21.6		ug/L		72	52 - 120	8	50
Benzo[b]fluoranthene	30.0	23.9		ug/L		80	53 - 134	11	54
Benzo[g,h,i]perylene	30.0	16.1		ug/L		54	47 - 133	6	50
Benzo[k]fluoranthene	30.0	23.5		ug/L		78	57 - 134	9	52
Chrysene	30.0	20.3		ug/L		68	55 - 122	10	50
Dibenz(a,h)anthracene	30.0	19.9		ug/L		66	48 - 146	12	50
Fluoranthene	30.0	21.0		ug/L		70	54 - 128	7	52
Fluorene	30.0	21.9		ug/L		73	45 - 125	13	56
Indeno[1,2,3-cd]pyrene	30.0	18.9		ug/L		63	43 - 142	11	51
Phenanthrene	30.0	20.3		ug/L		68	48 - 120	8	56
Pyrene	30.0	22.2		ug/L		74	48 - 132	2	52
1-Methylnaphthalene	30.0	22.3		ug/L		74	41 - 120	0	55
2-Methylnaphthalene	30.0	20.7		ug/L		69	32 - 124	3	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*
2-Fluorobiphenyl	*73*		*15 - 122*
Nitrobenzene-d5	*61*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-474833/1-A
Matrix: Water
Analysis Batch: 474884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474833

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		01/21/20 12:12	01/21/20 20:26	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-474833/1-A
Matrix: Water
Analysis Batch: 474884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		01/21/20 12:12	01/21/20 20:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*01/21/20 12:12*	*01/21/20 20:26*	*1*

Lab Sample ID: LCS 400-474833/2-A
Matrix: Water
Analysis Batch: 474884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.131		ug/L		131	60 - 140
1,2-Dibromoethane	0.100	0.104		ug/L		104	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*124*		*51 - 149*

Lab Sample ID: LCSD 400-474833/3-A
Matrix: Water
Analysis Batch: 474884

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 474833

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.153	*	ug/L		153	60 - 140	16	30
1,2-Dibromoethane	0.100	0.121		ug/L		121	60 - 140	16	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*144*		*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 - 1.03.001 / 60619901 - 1.03.0011	USPC/00114/R/02

☐ CHECK IF INCIDENT # APPLIES
DATE: 1/13/2020
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 - 1.03.001 / 60619901 - 1.03.0011

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
LOCAL 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): James Ragatz, Ben Burleson
LAB USE ONLY

TELEPHONE: 314-429-0100
FAX: 314-429-0462
Lab 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 ON WEEKEND ☐ RESULTS NEEDED

☐ 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

☑ 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 - 1.03.001: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0011: VOC 8011	PAH 8270LL
	TB-ROX-011320-SV60-A	1/13/20	0000	Water	2					2	2			
	TB-ROX-011320-8011-A	1/13/20	0000	H2O	2					2			2	
	ROST4PZG-ROX-011320	1/13/20	1115	H2O	4			2		6	2	1	2	1
	MW9-ROX-011320	1/13/20	1225	H2O	4			2		6	2	1	2	1
	MW9-ROX-011320-DUP	1/13/20	1225	H2O	4			2		6	2	1	2	1

400-182619 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
James Ragatz	Fedex: 135297061030	1/13/20	1600
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature) 3.4°C IR9	Date: 1-15-20	Time: 1010

Custody Seal #: 1197548, 1197549

Version: 14Dec15

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-182619-1

Login Number: 182619
List Number: 1
Creator: Brown, Nathan

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	3.4°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 400-182619-1

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	02-22-20
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	10-09-19 *
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 Secondary AB	12115	04-01-20
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	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P330-18-00148	05-17-21
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Appendix C

Charts – Benzene Concentrations Over Time – MW-7, MW-8, MW-22, MW-25, P-57, P-59, ROST-4-PZ(C), T-12

Table C1 - Historical Benzene Analytical Data for Select Groundwater Monitoring Wells

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-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)

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-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
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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

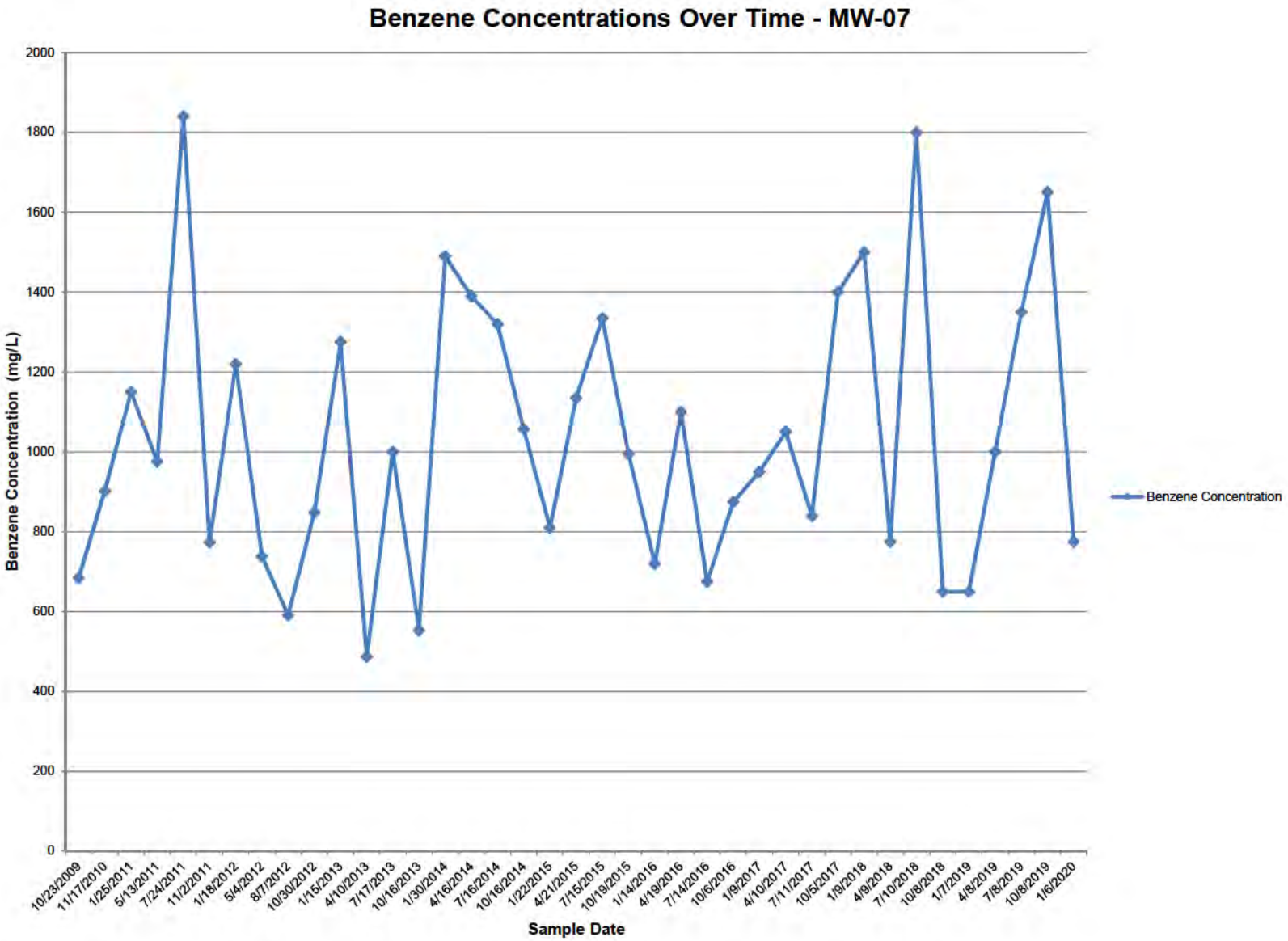
Location	Sample Date	Result (ug/L)
ROST-4-PZ(C)	5/3/2011	0.211
	5/14/2012	ND (<0.0005)
	7/25/2012	0.0849
	10/29/2012	0.0033
	1/11/2013	ND (<0.0005)
	4/10/2013	0.0153
	7/11/2013	0.0497
	10/9/2013	0.00066
	1/17/2014	0.0015
	4/10/2014	0.0019
	7/10/2014	0.0751
	10/9/2014	0.039
	1/15/2015	0.0013
	4/13/2015	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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-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

Notes:
mg/L = milligrams per liter
ND = non-detect
Dates specific to available data.



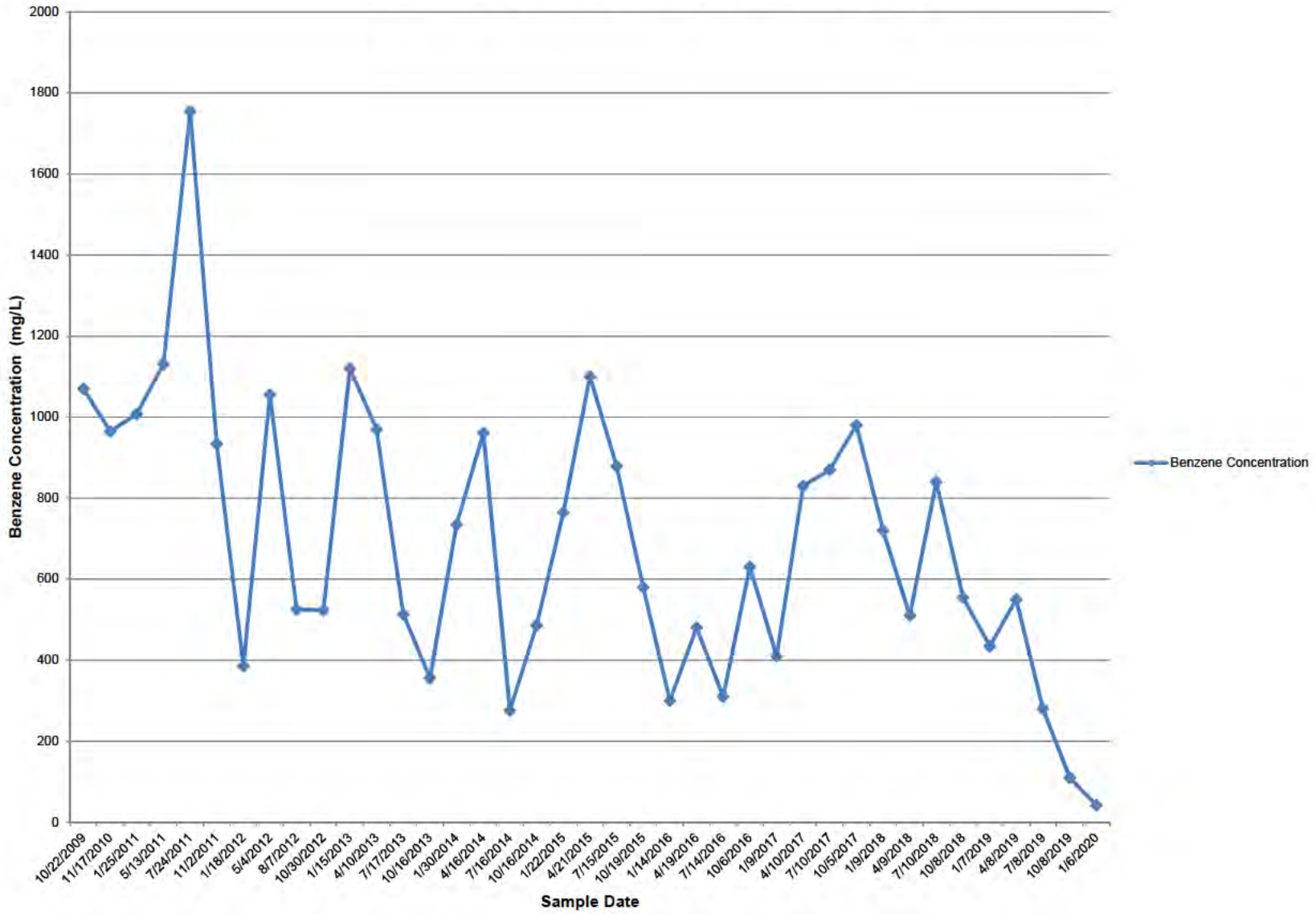
Notes:

mg/L = milligrams per liter

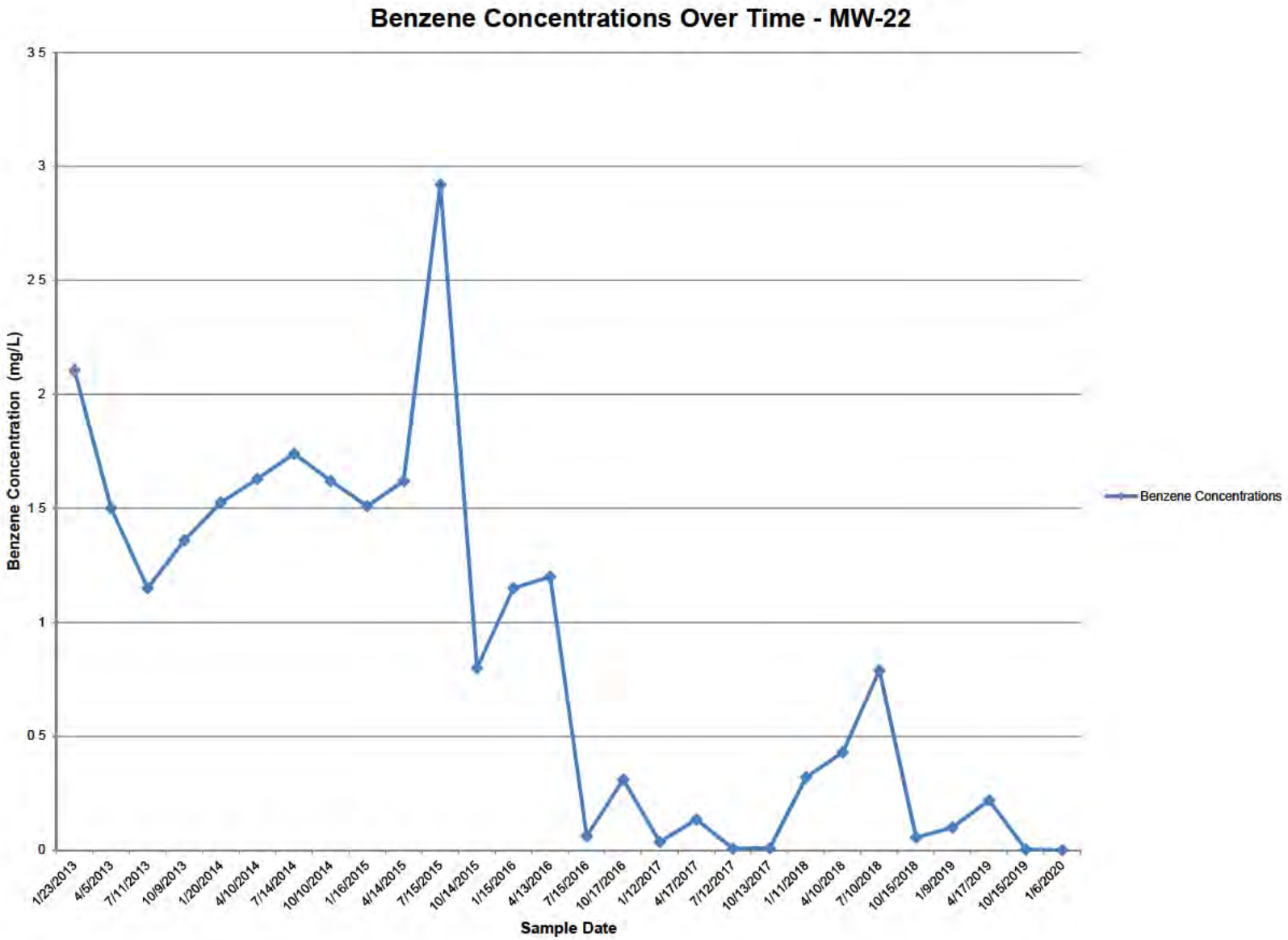
Duplicate values were averaged.

Timeframe specific to available data.

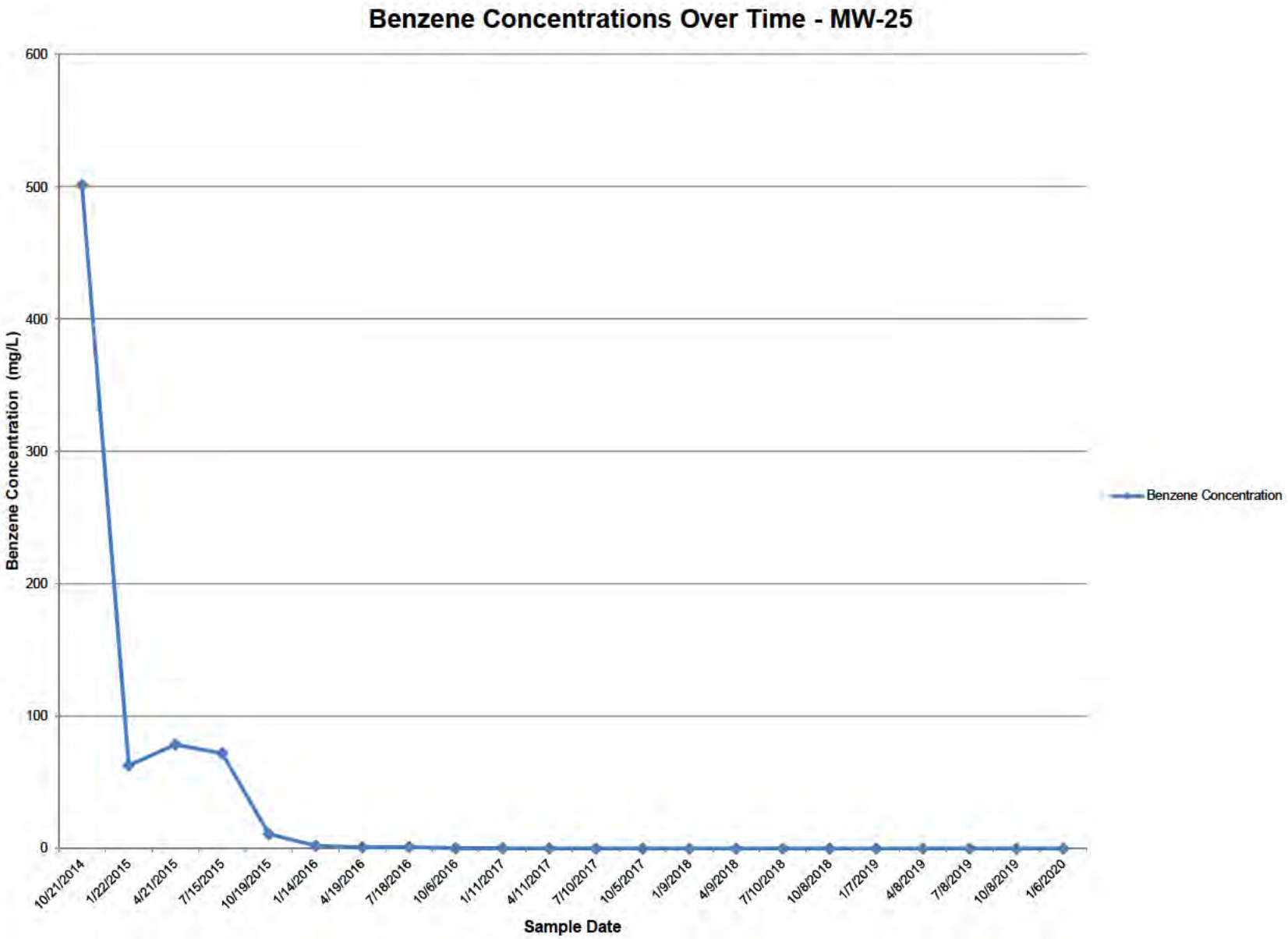
Benzene Concentrations Over Time - MW-08



Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.

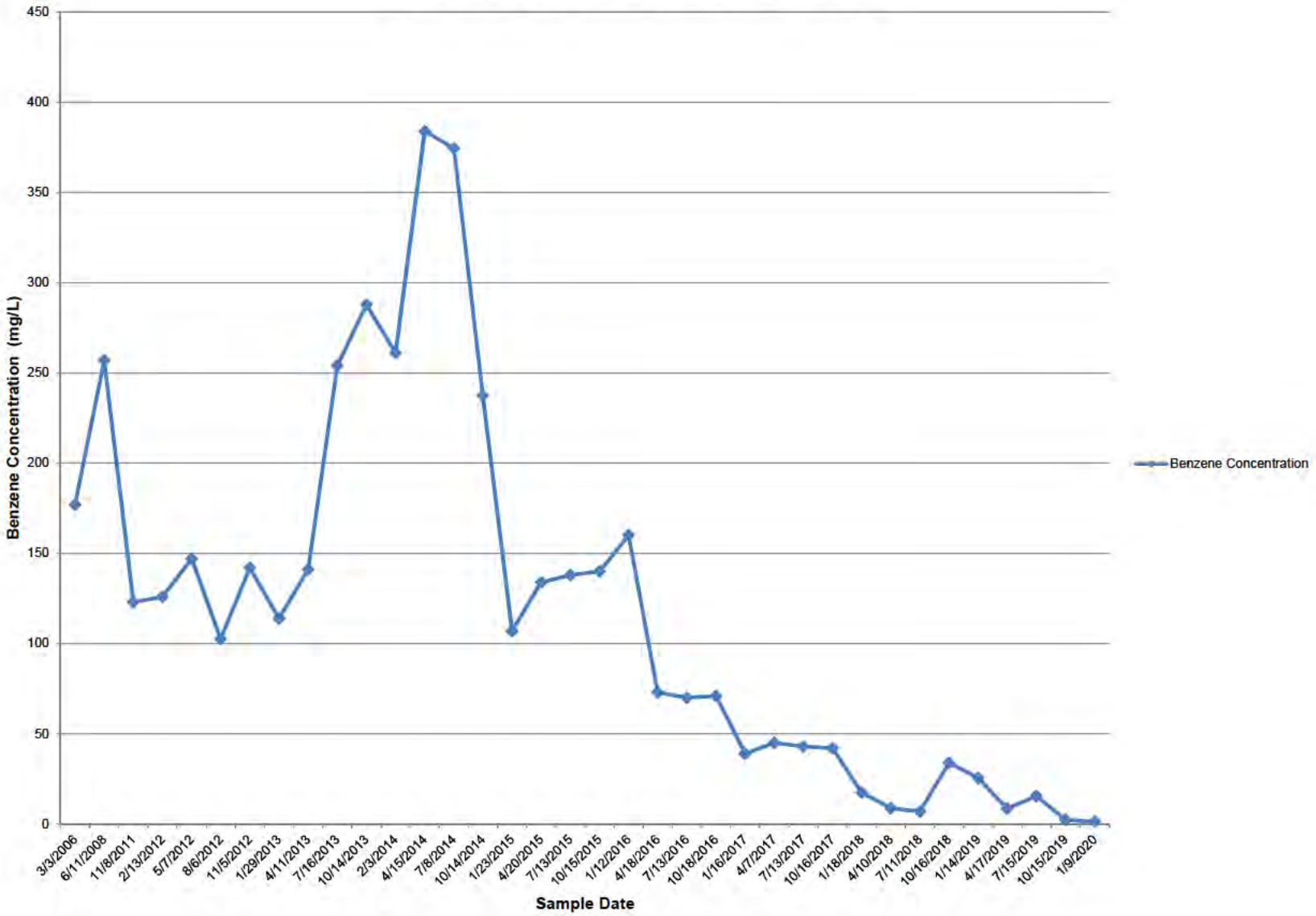


Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.
Non-detect values are shown at half the reporting limit.



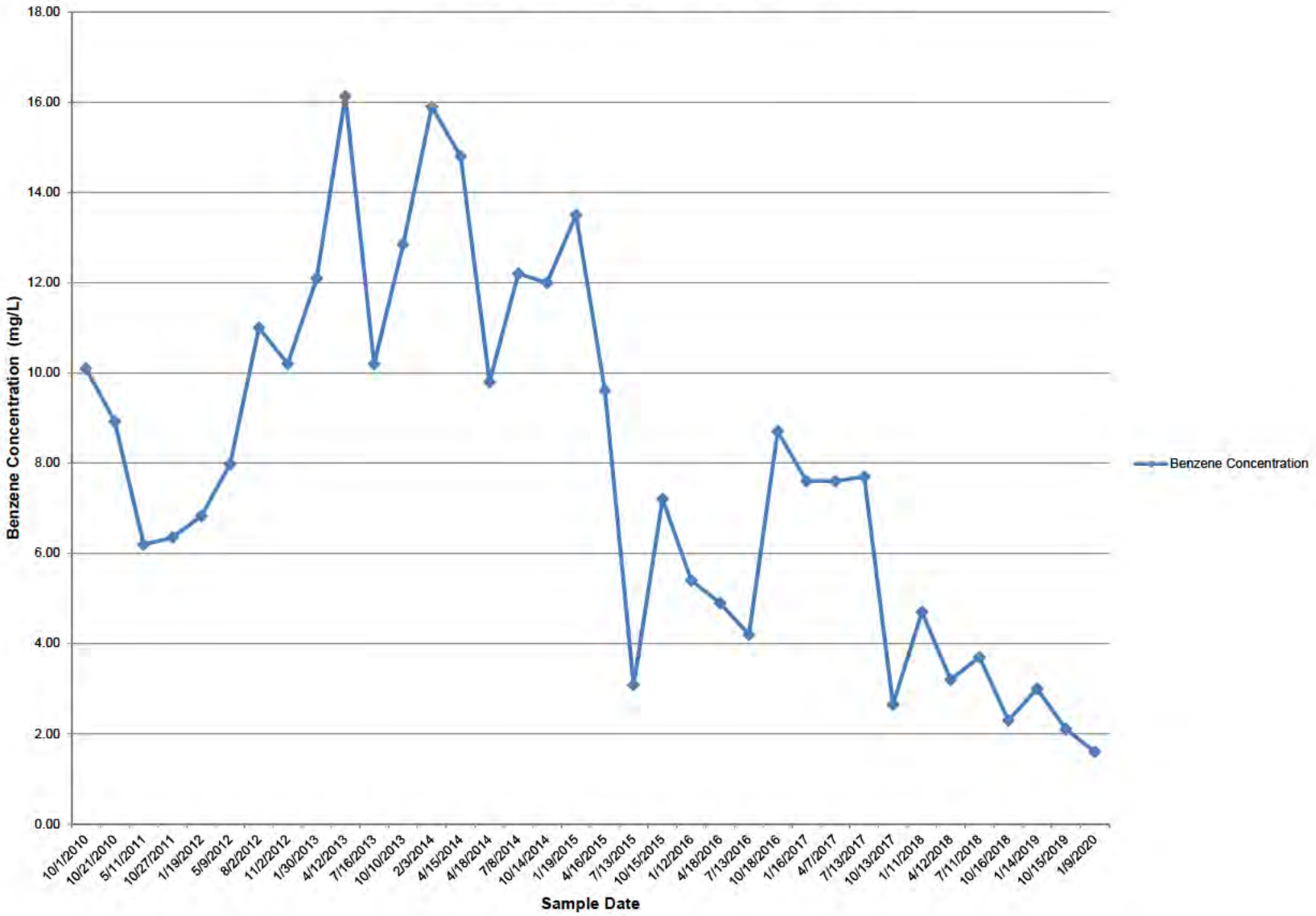
Notes:
mg/L = milligrams per liter
Timeframe specific to available data.

Benzene Concentrations Over Time - P-57

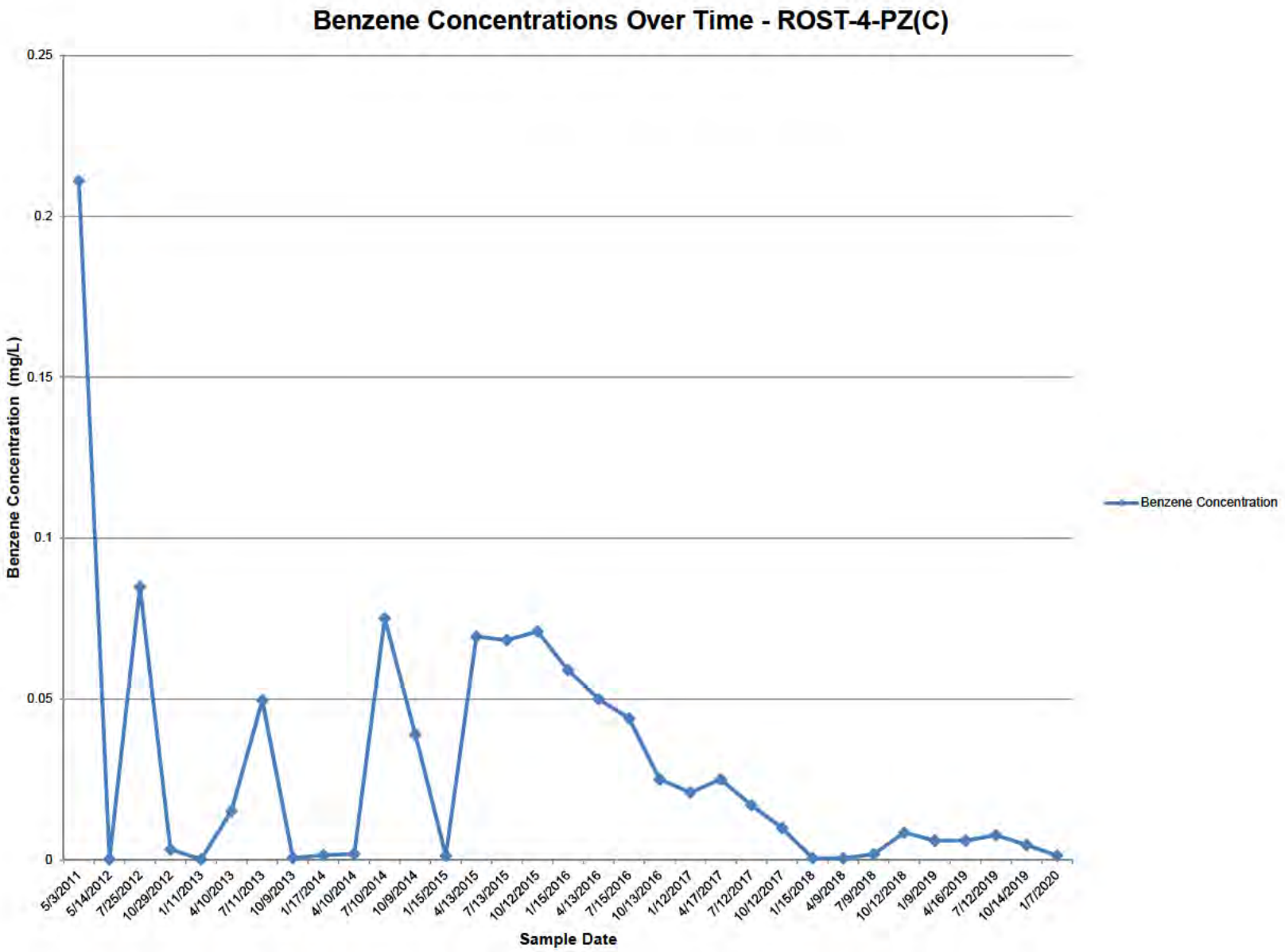


Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.

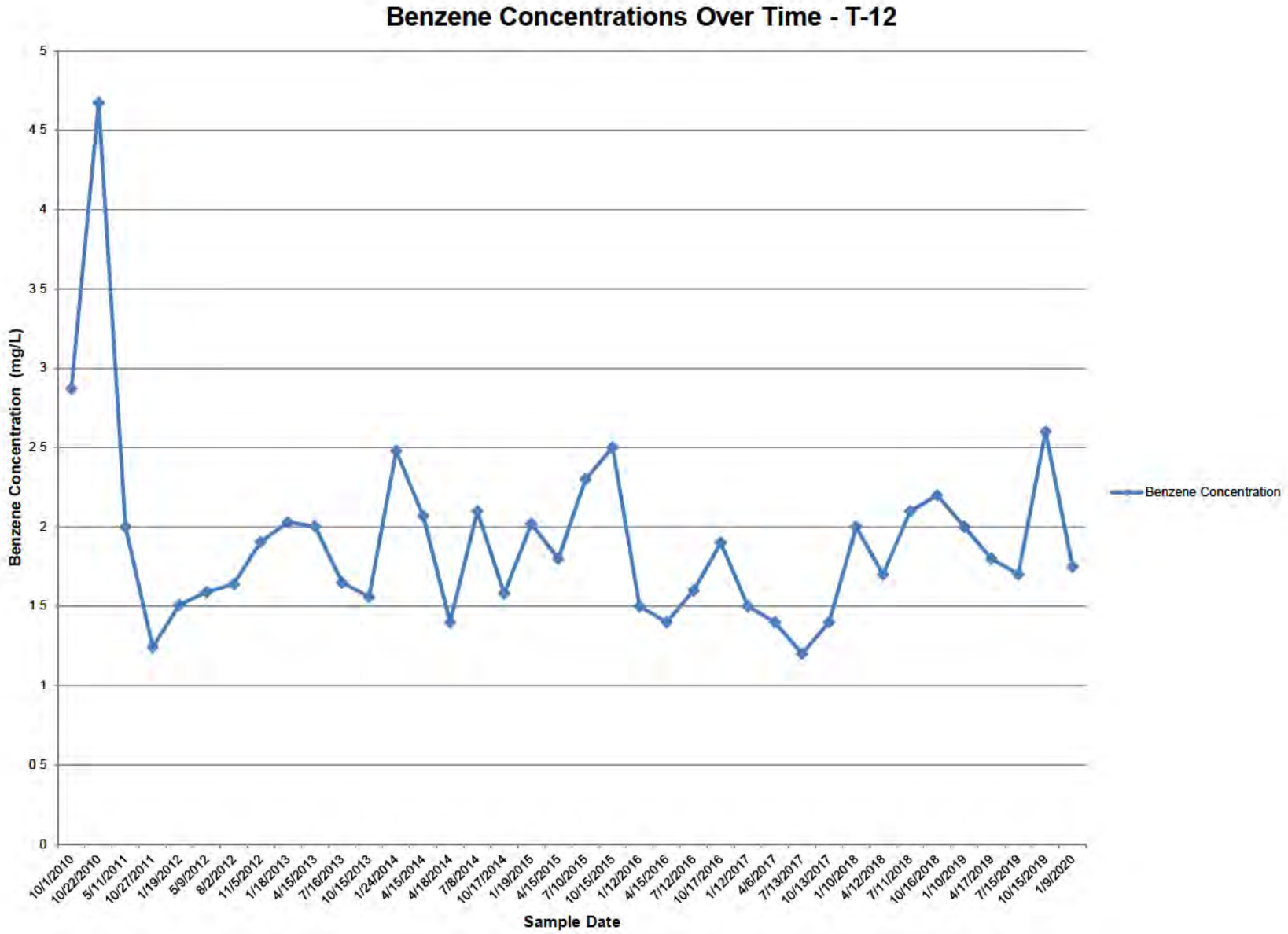
Benzene Concentrations Over Time - P-59



Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



Notes:
mg/L = milligrams per liter
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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