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)

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

☐ Well Construction Information

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

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

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

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

☐ Gas Monitoring Reports

☑ Other (identify)

Copies of this submittal sent separately directly to Amy Butler 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 fax

September 18, 2019

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 – 3rd Quarter 2019
Roxana, Illinois
1191150002 – Madison County
Equilon Enterprises LLC d/b/a Shell Oil Products US
Log No. B-43R-CA-21

Dear Mr. Smith:

On behalf of Shell Oil Products US (SOPUS), AECOM is submitting the enclosed referenced report and RCRA Facility Groundwater, Leachate and Gas Reporting Form for your review. This sampling was required by Condition 7 of the Agency's letter dated August 5, 2010.

Copies of this submittal are being sent separately directly to Amy Butler and Gina Search with Illinois Environmental Protection Agency (IEPA).

If you have any questions during your review, please contact Kevin Dyer, SOPUS Senior Principal Program Manager, at kevin.dyer@shell.com (618/288-7237), or Bob Billman at bob.billman@aecom.com (314/743-4108).

Sincerely,

AECOM, on behalf of Shell Oil Products US

Wendy Pennington
Project Engineer

Robert E. Mooshegian, STS
Senior Program Manager

Enclosures: 3rd Quarter 2019 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form
(Original plus 1 copy)

cc: Kevin Dyer, SOPUS
Thomas Morgan, Phillips 66
Amy Butler, IEPA, Springfield
Gina Search, IEPA, Collinsville
Lori Littrell, Atlantic Richfield Company
Shannon Haney, Greensfelder, Hemker & Gale P.C.
Repositories –Roxana Public Library, website

AECOM

3rd Quarter 2019 Report

Roxana Interim Groundwater Monitoring Program

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

Project Number: 60592794
September 2019

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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 3rd Quarter 2019 (3Q19) 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 June 13, 2014) (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.

Groundwater samples were collected and analyzed during 3Q19 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 Additional Activities or Modifications

The following additional work activities or modifications were conducted during 3Q19:

- In May and June 2019, elevations for the groundwater monitoring wells in the Interim Groundwater Monitoring Program were surveyed by Juneau Associates, a licensed surveyor. This was performed in conjunction with surveying of wells in the WRR program, which is in accordance with Condition IV.J.9 of the RCRA Permit. Based on this survey, updated elevations were incorporated in 3Q19.

2.2 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted on July 1 and 2, 2019; wells T-62, T-63, and T-64 were subsequently gauged on July 30, 2019, due to ponded water in the area. Well MW-22 was not gauged due to a vehicle parked over the well during the event. The 3Q19 gauging activities were conducted in conjunction with the 3Q19 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 Panasonic Toughpad® technology (Toughpad®), 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 July 8 and 15, 2019. 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 Toughpad® and on low flow groundwater sampling data sheets.

Groundwater monitoring wells MW-1 through MW-14, MW-16, MW-23 through MW-28, P-54, P-56, P-57, P-58, 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

[1] All designated tubing is stored in a sealed bag designated for a particular groundwater monitoring well between sampling events.

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 Toughpad® 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 well MW-22 was inaccessible for the duration of the 3Q19 groundwater monitoring event due to a parked vehicle and therefore was not sampled. Groundwater monitoring wells located inside the WRR and designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-59, 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**.

2.3 Health & Safety, Decontamination, and Investigation-Derived Waste

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.

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.

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 55-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).

2.4 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.

2.5 Data Quality Review and Data Management

Laboratory data were provided in electronic form and included data qualifiers on the basis of the laboratory's quality control or to indicate sample analysis information. The data were independently reviewed and qualified by AECOM. One hundred percent of the data were subjected to a data quality review. Evaluation of the data followed procedures outlined in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Data qualifiers were also added by AECOM, as appropriate, and are included on **Table 3** and in the laboratory results in **Appendix 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 Toughpad®; and
- Safety documentation.

3 Groundwater Sampling Results

This section presents the results of the 3Q19 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 3Q19 event was conducted on July 1 and 2, 2019. This groundwater monitoring well gauging was conducted in accordance with the Interim Groundwater Monitoring Program, and the results can be found in **Table 1**. The gauging results presented in Table 1 are based on the new survey results. Well construction elevation changes based on the survey results ranged from 0.00 to 0.32 for wells in the Interim Groundwater Monitoring Program. These new elevations can also be found in **Table 1**. Groundwater levels in most wells in the vicinity of the West Fenceline have risen approximately 3.5 to 4.5 feet since the 2Q19 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have risen approximately 1 to 2.5 feet since the 2Q19 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 3Q19 event. The potentiometric surface observed during the 3Q19 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates groundwater flow toward the WRR groundwater production wells. The increase in groundwater levels are attributed to the Mississippi River being at or above flood stage during mid-March through early-August 2019.

During the 3Q19 quarterly groundwater monitoring well gauging event, LNAPL was detected in three Interim Groundwater Monitoring Program groundwater monitoring wells. All of these monitoring wells (P-55R, P-59, and P-68) are located in the WRR (**Table 1**). In these wells, LNAPL thicknesses ranged from 0.01 to 0.50 feet. **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 3Q19 gauging event. LNAPL was not observed in groundwater monitoring wells located in the Village.

During 3Q19, LNAPL was removed using bailers from groundwater monitoring wells located on the WRR property if observed exceeding the minimum thickness for recovery (0.10 feet). LNAPL was recovered from P-55R and P-68 and placed in a double-walled lube cube, which is staged on WRR North Property, prior to being taken to the WRR oil-water separators for reprocessing.

3.2 Data Quality Review Results

A total of seven sample delivery groups (SDGs) were prepared and sent to TestAmerica for the 3Q19 event. Fifty-one different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 51 samples included 40 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 3Q19 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 10 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 surrogate compounds inadvertently omitted by the laboratory during the initial SVOC extraction process for the samples in SDG 400-173131-1, the laboratory re-extracted and analyzed these samples. The extraction holding time was exceeded for the re-extracted samples; however, the results from the re-analysis underwent data review and 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 2Q19 sampling event. The laboratory analytical results for the groundwater samples collected during this event are presented in **Table 3**.

Analytical detections were compared to the concentration limits as provided in Condition IV(E) 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 15 groundwater monitoring wells in the Interim Groundwater Monitoring Program (eight in the Village, seven in the WRR along the West Fenceline) exhibited exceedances of the groundwater screening criteria for one or more of the following constituents:

- Benzene
- Toluene
- Benzo(a)anthracene
- Benzo(b)fluoranthene
- 2-Methylnaphthalene
- Pentachlorophenol
- Ethylbenzene
- 1,3,5-Trimethylbenzene
- Benzo(a)pyrene
- Benzo(k)fluoranthene
- 3 & 4-Methylphenol (m & p-Cresol)
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 3Q19. **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 3Q19 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

– During 3Q19, 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

[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.

have risen approximately 3.5 to 4.5 feet since the 2Q19 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have risen approximately 1 to 2.5 feet since the previous quarter.

- The analytical results from 3Q19 are generally similar to 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.

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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											
4Q16		10/3/2016	NE	38.74	NA	NA	NA	403.91		0.6	*
1Q17		1/16/2017	NE	38.35	NA	NA	NA	404.30		2.7	*
2Q17		4/3/2017	NE	38.72	NA	NA	NA	403.93		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	442.65	1/2/2018	NE	39.42	NA	NA	NA	403.23	393.85 - 383.85 (48.80 - 58.80)	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	*
MW 02											
4Q16		10/3/2016	NE	40.11	NA	NA	NA	403.66		177	*
1Q17		1/16/2017	NE	39.58	NA	NA	NA	404.19		118	*
2Q17		4/3/2017	NE	39.97	NA	NA	NA	403.80		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	443.77	1/2/2018	NE	41.27	NA	NA	NA	402.50	393.90 - 383.90 (49.87 - 59.87)	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	*
MW 03											
4Q16		10/3/2016	NE	25.71	NA	NA	NA	404.37		0.3	*
1Q17		1/16/2017	NE	25.65	NA	NA	NA	404.43		0.2	*
2Q17		4/3/2017	NE	26.10	NA	NA	NA	403.98		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	430.08	1/2/2018	NE	27.17	NA	NA	NA	402.91	395.41 - 385.41 (34.67 - 44.67)	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	*
MW 04											
4Q16		10/3/2016	NE	37.13	NA	NA	NA	404.01		48.6	*
1Q17		1/16/2017	NE	36.84	NA	NA	NA	404.30		24.2	*
2Q17		4/3/2017	NE	37.17	NA	NA	NA	403.97		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	441.14	1/2/2018	NE	38.46	NA	NA	NA	402.68	396.08 - 386.08 (45.06 - 55.06)	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	*
MW 05											
4Q16		10/3/2016	NE	25.41	NA	NA	NA	404.39		0.4	*
1Q17		1/16/2017	NE	25.33	NA	NA	NA	404.47		2.0	*
2Q17		4/3/2017	NE	25.75	NA	NA	NA	404.05		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	429.80	1/2/2018	NE	27.01	NA	NA	NA	402.79	395.83 - 385.83 (33.97 - 43.97)	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	*

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QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 06A											
4Q16		10/3/2016	NE	27.51	NA	NA	NA	404.63		0.7	*
1Q17		1/16/2017	NE	27.43	NA	NA	NA	404.71		0.4	*
2Q17		4/3/2017	NE	27.78	NA	NA	NA	404.36	397.31 - 387.31	1.4	*
3Q17		7/5/2017	NE	26.11	NA	NA	NA	406.03	(34.83 - 44.83)	0.2	*
4Q17		10/2/2017	NE	26.98	NA	NA	NA	405.16		0.0	*
1Q18	432.14	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		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	398.29 - 388.29	0.0	*
1Q19		1/2/2019	NE	29.77	NA	NA	NA	402.37	(33.85 - 43.85)	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	*
MW 06B											
4Q16		10/3/2016	NE	27.52	NA	NA	NA	404.77		0.6	*
1Q17		1/16/2017	NE	27.49	NA	NA	NA	404.80		0.4	*
2Q17		4/3/2017	NE	27.89	NA	NA	NA	404.40		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	432.29	1/2/2018	NE	29.22	NA	NA	NA	403.07	368.24 - 363.24	0.0	*
2Q18		4/2/2018	NE	29.88	NA	NA	NA	402.41	(64.05 - 69.05)	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	368.3 - 363.32 (64.05 - 39.05)	0.0	*
MW 06C											
4Q16		10/3/2016	NE	27.33	NA	NA	NA	404.78		0.6	*
1Q17		1/16/2017	NE	27.26	NA	NA	NA	404.85		21.1	*
2Q17		4/3/2017	NE	27.61	NA	NA	NA	404.50		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	432.11	1/2/2018	NE	29.01	NA	NA	NA	403.10	347.16 - 342.16	0.0	*
2Q18		4/2/2018	NE	29.68	NA	NA	NA	402.43	(84.95 - 89.95)	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	*
MW 06D											
4Q16		10/3/2016	NE	27.16	NA	NA	NA	404.83		0.5	*
1Q17		1/16/2017	NE	27.14	NA	NA	NA	404.85		0.2	*
2Q17		4/3/2017	NE	27.47	NA	NA	NA	404.52		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	431.99	1/2/2018	NE	28.87	NA	NA	NA	403.12	327.27 - 322.27	0.0	*
2Q18		4/2/2018	NE	29.53	NA	NA	NA	402.46	(104.72 - 109.72)	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	*
MW 07											
4Q16		10/3/2016	NE	39.21	NA	NA	NA	403.89		3222	*
1Q17		1/16/2017	NE	38.90	NA	NA	NA	404.20		820	*
2Q17		4/3/2017	NE	39.09	NA	NA	NA	404.01		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	443.10	1/4/2018	NE	40.57	NA	NA	NA	402.53	400.18 - 390.18	2840	*PID data from 1/2/2018
2Q18		4/2/2018	NE	41.32	NA	NA	NA	401.78	(42.92 - 52.92)	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	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 08											
4Q16		10/4/2016	NE	30.01	NA	NA	NA	404.10		6793	*
1Q17		1/16/2017	NE	29.79	NA	NA	NA	404.32		106	*
2Q17		4/3/2017	NE	30.15	NA	NA	NA	403.96		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	434.11	1/2/2018	NE	31.53	NA	NA	NA	402.58	400.51 - 390.51 (33.60 - 43.60)	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	*
MW 09											
4Q16		10/3/2016	NE	40.44	NA	NA	NA	404.76		0.2	*
1Q17		1/16/2017	NE	40.06	NA	NA	NA	405.14		11.1	*
2Q17		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	445.20	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		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	399.16 - 389.16 (46.04 - 56.04)	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	*
MW 10											
4Q16		10/3/2016	NE	40.42	NA	NA	NA	404.61		0.2	*
1Q17		1/16/2017	NE	39.88	NA	NA	NA	405.15		0.0	*
2Q17		4/3/2017	NE	40.32	NA	NA	NA	404.71		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	445.03	1/2/2018	NE	40.94	NA	NA	NA	404.09	400.60 - 390.60 (44.43 - 54.43)	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	*
MW 11											
4Q16		10/3/2016	NE	37.99	NA	NA	NA	404.34		0.5	*
1Q17		1/16/2017	NE	37.63	NA	NA	NA	404.70		0.0	*
2Q17		4/3/2017	NE	38.10	NA	NA	NA	404.23		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	442.33	1/2/2018	NE	38.93	NA	NA	NA	403.40	400.67 - 390.67 (41.66 - 51.66)	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	*
MW 12											
4Q16		10/3/2016	NE	38.43	NA	NA	NA	404.17		0.5	*
1Q17		1/16/2017	NE	38.11	NA	NA	NA	404.49		1.2	*
2Q17		4/3/2017	NE	38.56	NA	NA	NA	404.04		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	442.60	1/2/2018	NE	39.55	NA	NA	NA	403.05	400.68 - 390.68 (41.92 - 51.92)	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	*

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 13											
4Q16		10/4/2016	NE	24.99	NA	NA	NA	405.28		86.6	*
1Q17		1/17/2017	NE	25.54	NA	NA	NA	404.73		20.6	*
2Q17		4/5/2017	NE	25.90	NA	NA	NA	404.37	404.70 - 394.70	98.7	
3Q17		7/6/2017	NE	23.67	NA	NA	NA	406.60	(25.57 - 35.57)	162	*
4Q17		10/2/2017	NE	24.95	NA	NA	NA	405.32		69.1	*
1Q18	430.27	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		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	405.47 - 395.47	4398	
1Q19		1/3/2019	NE	27.27	NA	NA	NA	403.00	(24.80 - 34.80)	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	*
MW 14											
4Q16		10/4/2016	NE	29.60	NA	NA	NA	404.84		54.2	*
1Q17		1/17/2017	NE	29.61	NA	NA	NA	404.83		71.0	*
2Q17		4/4/2017	NE	29.91	NA	NA	NA	404.53		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	434.44	1/4/2018	NE	31.23	NA	NA	NA	403.21	401.02 - 391.02 (33.42 - 43.42)	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	*
MW 16											
4Q16		10/4/2016	NE	39.72	NA	NA	NA	403.67		0.0	
1Q17		1/16/2017	NE	39.15	NA	NA	NA	404.24		0.1	
2Q17		4/3/2017	NE	39.51	NA	NA	NA	403.88	406.33 - 396.33	0.0	
3Q17		7/5/2017	NE	38.18	NA	NA	NA	405.21	(37.06 - 47.06)	4.6	
4Q17		10/2/2017	NE	38.15	NA	NA	NA	405.24		0.0	
1Q18	443.39	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		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	405.89 - 395.89	0.0	
1Q19		1/11/2019	NE	42.10	NA	NA	NA	401.29	(37.50 - 47.50)	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	
MW 17											
4Q16		10/3/2016	NE	38.22	NA	NA	NA	403.35		0.4	
1Q17		1/16/2017	NE	37.42	NA	NA	NA	404.15		144	
2Q17		4/3/2017	NE	37.62	NA	NA	NA	403.95		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	441.57	1/3/2018	NE	38.79	NA	NA	NA	402.78	407.28 - 392.28 (34.29 - 49.29)	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	
MW 18											
4Q16		10/3/2016	NE	38.91	NA	NA	NA	403.13		9.0	
1Q17		1/16/2017	NE	38.08	NA	NA	NA	403.96		2.5	
2Q17		4/3/2017	NE	38.19	NA	NA	NA	403.85		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	442.04	1/2/2018	NE	39.73	NA	NA	NA	402.31	407.12 - 392.12 (34.92 - 49.92)	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	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 19											
4Q16		10/3/2016	NE	39.44	NA	NA	NA	403.33		0.5	
1Q17		1/16/2017	NE	38.72	NA	NA	NA	404.05		5.6	
2Q17		4/3/2017	NE	38.93	NA	NA	NA	403.84		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	442.77	1/4/2018	NE	40.32	NA	NA	NA	402.45	406.43 - 391.43 (36.34 - 51.34)	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	
MW 20											
4Q16		10/3/2016	NE	40.19	NA	NA	NA	403.48		0.4	
1Q17		1/16/2017	NE	39.54	NA	NA	NA	404.13		0.1	
2Q17		4/3/2017	NE	39.93	NA	NA	NA	403.74		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	443.67	1/3/2018	NE	41.03	NA	NA	NA	402.64	407.79 - 392.79 (35.88 - 50.88)	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	
MW 21											
4Q16		10/3/2016	NE	40.55	NA	NA	NA	403.26		0.3	
1Q17		1/16/2017	NE	39.68	NA	NA	NA	404.13		0.2	
2Q17		4/3/2017	NE	39.95	NA	NA	NA	403.86		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	443.81	1/2/2018	NE	41.44	NA	NA	NA	402.37	408.80 - 393.80 (35.01 - 50.01)	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	
MW 22											
4Q16		10/3/2016	NE	38.44	NA	NA	NA	403.72		1.2	
1Q17		1/16/2017	NE	37.80	NA	NA	NA	404.36		84.4	*
2Q17		4/3/2017	NE	38.20	NA	NA	NA	403.96		4.7	
3Q17		7/5/2017	NE	36.89	NA	NA	NA	405.27	404.28 - 394.28 (37.88 - 47.88)	16.5	*
4Q17		10/2/2017	NE	36.74	NA	NA	NA	405.42		8.1	*
1Q18	442.16	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		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	403.73 - 393.73 (38.43 - 48.43)	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
MW 23											
4Q16		10/3/2016	NE	26.53	NA	NA	NA	404.88		1.0	*
1Q17		1/16/2017	NE	26.83	NA	NA	NA	404.58		0.7	*
2Q17		4/3/2017	NE	27.40	NA	NA	NA	404.01		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	431.41	1/2/2018	NE	28.34	NA	NA	NA	403.07	402.39 - 392.39 (29.02 - 39.02)	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	*

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 24											
4Q16		10/3/2016	NE	39.28	NA	NA	NA	404.14		117	
1Q17		1/16/2017	NE	38.97	NA	NA	NA	404.45		11.2	
2Q17		4/3/2017	NE	39.45	NA	NA	NA	403.97	404.53 - 394.53	0.8	
3Q17		7/5/2017	NE	37.75	NA	NA	NA	405.67	(38.89 - 48.89)	3.6	*
4Q17		10/2/2017	NE	38.03	NA	NA	NA	405.39		0.0	*
1Q18	443.42	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		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	403.81 - 393.81	1.8	
1Q19		1/2/2019	NE	41.63	NA	NA	NA	401.79	(39.61 - 49.61)	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	*
MW 25											
4Q16		10/3/2016	NE	34.23	NA	NA	NA	404.12		52.0	*
1Q17		1/16/2017	NE	34.00	NA	NA	NA	404.35		42.6	*
2Q17		4/3/2017	NE	34.33	NA	NA	NA	404.02		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	438.35	1/3/2018	NE	35.51	NA	NA	NA	402.84	402.76 - 392.76 (35.59 - 45.59)	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	*
MW 26											
4Q16		10/3/2016	NE	37.10	NA	NA	NA	403.92		0.2	*
1Q17		1/16/2017	NE	36.74	NA	NA	NA	404.28		0.2	*
2Q17		4/3/2017	NE	37.09	NA	NA	NA	403.93		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	441.02	1/2/2018	NE	38.33	NA	NA	NA	402.69	402.87 - 392.87 (38.15 - 48.15)	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	*
MW 27											
4Q16		10/3/2016	NE	38.60	NA	NA	NA	404.80		0.4	*
1Q17		1/16/2017	NE	38.05	NA	NA	NA	405.35		0.4	*
2Q17		4/3/2017	NE	38.58	NA	NA	NA	404.82		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	443.40	1/2/2018	NE	38.78	NA	NA	NA	404.62	403.61 - 393.61 (39.79 - 49.79)	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	*
MW 28											
4Q16		10/3/2016	NE	37.81	NA	NA	NA	405.53		0.5	
1Q17		1/16/2017	NE	37.14	NA	NA	NA	406.20		7.2	
2Q17		4/3/2017	NE	37.78	NA	NA	NA	405.56		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	443.34	1/2/2018	NE	37.96	NA	NA	NA	405.38	409.73 - 399.73 (33.61 - 43.61)	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	

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 01											
4Q16		10/5/2016	NE	27.94	NA	NA	NA	414.79		0.2	*
1Q17		1/17/2017	NE	29.46	NA	NA	NA	413.27		0.0	*
2Q17		4/4/2017	NE	30.25	NA	NA	NA	412.48	380.78 - 375.78	0.0	*
3Q17		7/5/2017	NE	26.73	NA	NA	NA	416.00	(61.95 - 66.95)	0.0	*
4Q17		10/3/2017	NE	28.94	NA	NA	NA	413.79		0.0	*
1Q18	442.73	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		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	380.51 - 375.51 (62.22 - 67.22)	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	*
P 4U											
4Q16		10/5/2016	NE	29.49	NA	NA	NA	413.05		NM	*
1Q17		1/17/2017	NE	30.53	NA	NA	NA	412.01		0.0	*
2Q17		4/4/2017	NE	31.39	NA	NA	NA	411.15		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	442.54	1/4/2018	NE	31.25	NA	NA	NA	411.29	361.39 - 359.39 (81.15 - 83.15)	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	*
P 5L											
4Q16		10/5/2016	NE	28.83	NA	NA	NA	415.01		0.0	*
1Q17		1/17/2017	NE	30.59	NA	NA	NA	413.25		0.0	*
2Q17		4/4/2017	NE	31.52	NA	NA	NA	412.32		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	443.84	1/3/2018	NE	31.43	NA	NA	NA	412.41	303.44 - 301.44 (140.40 - 142.40)	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	*
P 5U											
4Q16		10/5/2016	NE	30.46	NA	NA	NA	413.78		0.1	*
1Q17		1/17/2017	NE	31.81	NA	NA	NA	412.43		0.0	*
2Q17		4/4/2017	NE	32.69	NA	NA	NA	411.55		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	444.24	1/3/2018	NE	32.44	NA	NA	NA	411.80	313.61 - 311.61 (130.63 - 132.63)	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	*
P 6U											
4Q16		10/5/2016	NE	29.93	NA	NA	NA	413.52		0.0	*
1Q17		1/17/2017	NE	31.19	NA	NA	NA	412.26		0.0	*
2Q17		4/4/2017	NE	32.11	NA	NA	NA	411.34		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	443.45	1/4/2018	NE	32.14	NA	NA	NA	411.31	362.95 - 360.95 (80.50 - 82.50)	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	*

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 7U											
4Q16		10/5/2016	NE	29.98	NA	NA	NA	413.93		0.0	*
1Q17		1/17/2017	NE	31.43	NA	NA	NA	412.48		0.0	*
2Q17		4/4/2017	NE	32.37	NA	NA	NA	411.54		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	443.91	1/3/2018	NE	32.38	NA	NA	NA	411.53	382.83 - 380.83 (61.08 - 63.08)	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	*
P 8U											
4Q16		10/4/2016	NE	30.74	NA	NA	NA	411.11		0.0	*
1Q17		1/17/2017	NE	31.42	NA	NA	NA	410.43		0.0	*
2Q17		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	441.85	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		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	381.72 - 379.72 (60.13 - 62.13)	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	*
P 9U											
4Q16		10/4/2016	NE	35.83	NA	NA	NA	409.21		0.8	*
1Q17		1/17/2017	NE	35.97	NA	NA	NA	409.07		0.0	*
2Q17		4/3/2017	NE	36.30	NA	NA	NA	408.74		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	445.04	1/4/2018	NE	36.60	NA	NA	NA	408.44	344.45 - 342.45 (100.59 - 102.59)	40.5	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at we l - 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	*
P 11L											
4Q16		10/5/2016	NE	31.89	NA	NA	NA	410.66		0.2	*
1Q17		1/17/2017	NE	32.26	NA	NA	NA	410.29		0.0	*
2Q17		4/4/2017	NE	33.01	NA	NA	NA	409.54		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	442.55	1/4/2018	NE	32.83	NA	NA	NA	409.72	332.34 - 330.34 (110.21 - 112.21)	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	*
P 11U											
4Q16		10/5/2016	NE	32.53	NA	NA	NA	410.64		0.2	*
1Q17		1/17/2017	NE	32.90	NA	NA	NA	410.27		0.0	*
2Q17		4/4/2017	NE	33.61	NA	NA	NA	409.56		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	443.17	1/4/2018	NE	33.45	NA	NA	NA	409.72	343.25 - 341.25 (99.92 - 101.92)	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	*

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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 14											
4Q16		10/5/2016	NE	28.03	NA	NA	NA	414.71		0.0	*
1Q17		1/17/2017	NE	29.55	NA	NA	NA	413.19		0.0	*
2Q17		4/4/2017	NE	30.33	NA	NA	NA	412.41	395.41 - 385.41	0.0	*
3Q17		7/5/2017	NE	26.80	NA	NA	NA	415.94	(47.33 - 57.33)	0.0	*
4Q17		10/3/2017	NE	29.00	NA	NA	NA	413.74		0.0	*
1Q18	442.74	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		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	395.27 - 385.27	0.0	*
1Q19		1/3/2019	NE	33.34	NA	NA	NA	409.40	(47.47 - 57.47)	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	*
P 15											
4Q16		10/5/2016	NE	30.13	NA	NA	NA	413.56		0.0	*
1Q17		1/17/2017	NE	31.20	NA	NA	NA	412.49		0.0	*
2Q17		4/4/2017	NE	32.12	NA	NA	NA	411.57		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	443.69	1/4/2018	NE	31.93	NA	NA	NA	411.76	398.24 - 388.24	0.0	*
2Q18		4/4/2018	NE	33.19	NA	NA	NA	410.50	(45.45 - 55.45)	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	*
P 16											
4Q16		10/5/2016	NE	28.75	NA	NA	NA	413.93		0.0	*
1Q17		1/17/2017	NE	30.08	NA	NA	NA	412.60		0.0	*
2Q17		4/4/2017	NE	30.99	NA	NA	NA	411.69		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	442.68	1/4/2018	NE	31.07	NA	NA	NA	411.61	396.94 - 386.94	0.0	*
2Q18		4/3/2018	NE	31.66	NA	NA	NA	411.02	(45.74 - 55.74)	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	*
P 43											
4Q16		10/5/2016	NE	33.34	NA	NA	NA	411.10		0.2	*
1Q17		1/17/2017	NE	33.71	NA	NA	NA	410.73		0.0	*
2Q17		4/4/2017	NE	34.52	NA	NA	NA	409.92		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	444.44	1/4/2018	NE	34.34	NA	NA	NA	410.10	380.88 - 370.88	0.0	*
2Q18		4/3/2018	NE	35.37	NA	NA	NA	409.07	(63.56 - 73.56)	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	*
P 53											
4Q16		10/4/2016	NE	40.12	NA	NA	NA	406.29		0.0	
1Q17		1/16/2017	NE	39.63	NA	NA	NA	406.78		5.8	
2Q17		4/3/2017	NE	40.04	NA	NA	NA	406.37		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	446.41	1/2/2018	NE	40.11	NA	NA	NA	406.30	407.91 - 382.91	0.5	
2Q18		4/3/2018	NE	41.38	NA	NA	NA	405.03	(38.50 - 63.50)	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		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	

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 54											
4Q16		10/3/2016	NE	37.96	NA	NA	NA	404.36		0.4	*
1Q17		1/16/2017	NE	37.80	NA	NA	NA	404.52		0.2	*
2Q17		4/3/2017	NE	38.28	NA	NA	NA	404.04		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	442.32	1/2/2018	NE	39.02	NA	NA	NA	403.30	404.32 - 379.32 (38.00 - 63.00)	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	*
P 55R											
4Q16		10/3/2016	39.28	39.45	404.34	404.51	0.17	404.48		394	*
1Q17		1/16/2017	38.82	39.30	404.49	404.97	0.48	404.87		133	*
2Q17		4/3/2017	39.06	39.34	404.45	404.73	0.28	404.67		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	443.79	1/2/2018	40.30	40.38	403.41	403.49	0.08	403.47	403.36 - 393.36 (40.43 - 50.43)	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	444.00	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	*
P 56											
4Q16		10/3/2016	NE	42.72	NA	NA	NA	403.42		0.0	
1Q17		1/16/2017	NE	42.01	NA	NA	NA	404.13		180	
2Q17		4/3/2017	NE	42.43	NA	NA	NA	403.71		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	446.14	1/3/2018	NE	43.51	NA	NA	NA	402.63	405.32 - 380.32 (40.82 - 65.82)	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	
P 57											
4Q16		10/3/2016	NE	43.40	NA	NA	NA	403.56		141	*
1Q17		1/16/2017	NE	42.89	NA	NA	NA	404.07		135	*
2Q17		4/3/2017	NE	43.21	NA	NA	NA	403.75		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	446.96	1/2/2018	NE	44.59	NA	NA	NA	402.37	402.77 - 392.77 (44.19 - 54.19)	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	*

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 58											
4Q16	444.94	10/3/2016	NE	41.25	NA	NA	NA	403.69	404.73 - 379.73 (40.21 - 65.21)	0.0	
1Q17		1/16/2017	NE	40.78	NA	NA	NA	404.16		135	
2Q17		4/3/2017	NE	40.91	NA	NA	NA	404.03		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	*
P 59											
4Q16	446.86	10/3/2016	NE	43.65	NA	NA	NA	403.21	398.95 - 373.95 (47.91 - 72.91)	424	*
1Q17		1/16/2017	NE	42.83	NA	NA	NA	404.03		221	*
2Q17		4/3/2017	NE	43.06	NA	NA	NA	403.80		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	*
P 60											
4Q16	446.69	10/3/2016	43.00	43.05	403.64	403.69	0.05	403.68	403.24 - 383.24 (43.45 - 63.45)	145	*
1Q17		1/16/2017	42.25	42.31	404.38	404.44	0.06	404.43		59.7	*
2Q17		4/3/2017	42.49	42.52	404.17	404.20	0.03	404.19		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	*
P 61											
4Q16	444.47	10/4/2016	NE	41.11	NA	NA	NA	403.36	398.80 - 373.80 (45.68 - 70.68)	17.7	*
1Q17		1/16/2017	NE	40.19	NA	NA	NA	404.28		113	*
2Q17		4/3/2017	40.50	40.61	403.86	403.97	0.11	403.95		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 we l - 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	*

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 62											
4Q16		10/4/2016	38.63	38.70	403.73	403.80	0.07	403.79		268	*
1Q17		1/16/2017	NE	37.81	NA	NA	NA	404.62		119	*
2Q17		4/3/2017	38.04	38.13	404.30	404.39	0.09	404.37		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	442.43	1/3/2018	39.05	39.09	403.34	403.38	0.04	403.37	400.96 - 375.96 (41.47 - 66.47)	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	*
P 63											
4Q16		10/4/2016	42.14	42.17	403.68	403.71	0.03	403.70		6.0	*
1Q17		1/17/2017	41.58	41.62	404.23	404.27	0.04	404.26		52.7	*
2Q17		4/3/2017	41.66	41.69	404.16	404.19	0.03	404.18		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	445.85	1/3/2018	42.27	42.29	403.56	403.58	0.02	403.58	398.56 - 373.56 (47.29 - 72.29)	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	*
P 64											
4Q16		10/4/2016	43.21	43.29	403.60	403.68	0.08	403.66		16.0	*
1Q17		1/17/2017	NE	42.64	NA	NA	NA	404.25		399	*
2Q17		4/4/2017	43.10	43.18	403.71	403.79	0.08	403.77		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	446.89	1/3/2018	43.20	43.23	403.66	403.69	0.03	403.68	399.66 - 374.66 (47.23 - 72.23)	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	*
P 65											
4Q16		10/4/2016	40.75	40.78	403.82	403.85	0.03	403.84		17.1	*
1Q17		1/16/2017	NE	40.08	NA	NA	NA	404.52		7.6	*
2Q17		4/3/2017	NE	40.08	NA	NA	NA	404.52		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	444.60	1/3/2018	NE	41.10	NA	NA	NA	403.50	397.58 - 372.58 (47.02 - 72.02)	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	*
P 66											
4Q16		10/4/2016	NE	32.67	NA	NA	NA	404.14		68.1	*
1Q17		1/17/2017	NE	32.41	NA	NA	NA	404.40		88.1	*
2Q17		4/4/2017	NE	32.55	NA	NA	NA	404.26		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	436.81	1/4/2018	NE	34.06	NA	NA	NA	402.75	402.09 - 377.09 (34.72 - 59.72)	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	*

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 67											
4Q16		10/4/2016	NE	38.63	NA	NA	NA	405.47		13.1	*
1Q17		1/17/2017	NE	38.50	NA	NA	NA	405.60		35.6	*
2Q17		4/4/2017	NE	38.85	NA	NA	NA	405.25		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	444.10	1/4/2018	39.98	39.99	404.11	404.12	0.01	404.12	402.12 - 377.12 (41.98 - 66.98)	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	*
P 68											
4Q16		10/4/2016	42.52	42.59	402.59	402.66	0.07	402.65		183	*
1Q17		1/16/2017	40.70	40.71	404.47	404.48	0.01	404.48		101	*
2Q17		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	445.18	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		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	401.42 - 376.42 (43.76 - 68.76)	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	*
P 69											
4Q16		10/4/2016	NE	40.22	NA	NA	NA	403.18		122	*
1Q17		1/16/2017	NE	39.31	NA	NA	NA	404.09		337	*
2Q17		4/3/2017	NE	39.55	NA	NA	NA	403.85		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	443.40	1/3/2018	NE	40.76	NA	NA	NA	402.64	402.58 - 377.58 (40.82 - 65.82)	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	*
P 70											
4Q16		10/4/2016	39.40	39.45	403.50	403.55	0.05	403.54		345	*
1Q17		1/16/2017	38.52	38.57	404.38	404.43	0.05	404.42		289	*
2Q17		4/3/2017	38.81	38.84	404.11	404.14	0.03	404.13		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	442.95	1/2/2018	40.03	40.06	402.89	402.92	0.03	402.91	398.28 - 373.28 (44.67 - 69.67)	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	*
P 71											
4Q16		10/4/2016	NE	40.76	NA	NA	NA	404.18		78.0	*
1Q17		1/16/2017	NE	40.05	NA	NA	NA	404.89		0.0	*
2Q17		4/3/2017	NE	40.43	NA	NA	NA	404.51		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	444.94	1/3/2018	NE	41.42	NA	NA	NA	403.52	402.33 - 377.33 (42.61 - 67.61)	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	*

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 72											
4Q16		10/4/2016	NE	40.53	NA	NA	NA	403.96		0.6	*
1Q17		1/16/2017	NE	39.55	NA	NA	NA	404.94		14.4	*
2Q17		4/3/2017	NE	39.66	NA	NA	NA	404.83		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	444.49	1/3/2018	NE	40.84	NA	NA	NA	403.65	398.72 - 373.72 (45.77 - 70.77)	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	*
P 73											
4Q16		10/4/2016	NE	40.81	NA	NA	NA	403.05		20.0	*
1Q17		1/16/2017	NE	40.00	NA	NA	NA	403.86		112	*
2Q17		4/3/2017	NE	39.55	NA	NA	NA	404.31		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	443.86	1/3/2018	NE	41.93	NA	NA	NA	401.93	402.27 - 377.27 (41.59 - 66.59)	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	*
P 74											
4Q16		10/4/2016	NE	39.51	NA	NA	NA	403.21		9.7	*
1Q17		1/16/2017	NE	38.64	NA	NA	NA	404.08		0.0	*
2Q17		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	442.72	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		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	398.89 - 373.89 (43.83 - 68.83)	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	*
P 75											
4Q16		10/4/2016	NE	42.64	NA	NA	NA	403.78		9.9	*
1Q17		1/17/2017	NE	42.25	NA	NA	NA	404.17		33.6	*
2Q17		4/4/2017	NE	42.19	NA	NA	NA	404.23		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	446.42	1/4/2018	NE	44.01	NA	NA	NA	402.41	403.29 - 378.29 (43.13 - 68.13)	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	*
P 82A											
4Q16		10/5/2016	NE	25.73	NA	NA	NA	409.29		0.0	*
1Q17		1/16/2017	NE	26.17	NA	NA	NA	408.85		0.0	*
2Q17		4/4/2017	NE	26.88	NA	NA	NA	408.14		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	435.02	1/3/2018	NE	27.54	NA	NA	NA	407.48	401.81 - 386.81 (33.21 - 48.21)	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	*

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											
4Q16		10/5/2016	NE	25.46	NA	NA	NA	409.02		0.0	*
1Q17		1/16/2017	NE	25.88	NA	NA	NA	408.60		0.0	*
2Q17		4/4/2017	NE	26.61	NA	NA	NA	407.87	370.88 - 368.88	0.0	*
3Q17		7/6/2017	NE	24.42	NA	NA	NA	410.06	(63.60 - 65.60)	0.0	*
4Q17		10/3/2017	NE	25.70	NA	NA	NA	408.78		0.0	*
1Q18	434.48	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		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	371.68 - 369.68 (62.80 - 64.80)	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	*
P 82C											
4Q16		10/5/2016	NE	25.20	NA	NA	NA	409.01		0.0	*
1Q17		1/16/2017	NE	25.60	NA	NA	NA	408.61		0.0	*
2Q17		4/4/2017	NE	26.30	NA	NA	NA	407.91		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	434.21	1/3/2018	NE	26.98	NA	NA	NA	407.23	351.44 - 349.44 (82.77 - 84.77)	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 - 649.64 (82.77 - 84.77)	0.0	*
P 82D											
4Q16		10/5/2016	NE	25.95	NA	NA	NA	408.94		0.0	*
1Q17		1/16/2017	NE	26.40	NA	NA	NA	408.49		0.0	*
2Q17		4/4/2017	NE	27.09	NA	NA	NA	407.80	323.47 - 321.47	0.0	*
3Q17		7/6/2017	NE	24.90	NA	NA	NA	409.99	(111.42 - 113.42)	0.0	*
4Q17		10/3/2017	NE	26.20	NA	NA	NA	408.69		0.0	*
1Q18	434.89	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		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	323.35 - 321.35 (111.54 - 113.54)	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	*
P 83A											
4Q16		10/3/2016	NE	39.79	NA	NA	NA	405.57		0.0	*
1Q17		1/16/2017	NE	39.25	NA	NA	NA	406.11		0.0	*
2Q17		4/3/2017	NE	39.56	NA	NA	NA	405.80		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	398.71 - 383.71	0.0	*
1Q18	445.36	1/3/2018	NE	39.76	NA	NA	NA	405.60	(46.65 - 61.65)	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	*
P 83B											
4Q16		10/3/2016	NE	40.23	NA	NA	NA	405.32		1.4	*
1Q17		1/16/2017	NE	39.48	NA	NA	NA	406.07		0.4	*
2Q17		4/3/2017	NE	39.83	NA	NA	NA	405.72	375.90 - 373.90	11.0	*
3Q17		7/6/2017	NE	38.71	NA	NA	NA	406.84	(69.65 - 71.65)	0.0	*
4Q17		10/3/2017	NE	39.13	NA	NA	NA	406.42		0.0	*
1Q18	445.55	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		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	371.75 - 369.75 (73.80 - 75.80)	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	*

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 83C											
4Q16		10/3/2016	NE	40.19	NA	NA	NA	405.59		0.0	*
1Q17		1/16/2017	NE	39.63	NA	NA	NA	406.15		0.6	*
2Q17		4/3/2017	NE	39.96	NA	NA	NA	405.82		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	445.78	1/3/2018	NE	40.16	NA	NA	NA	405.62	353.39 - 351.39 (92.39 - 94.39)	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	*
P 83D											
4Q16		10/3/2016	NE	40.15	NA	NA	NA	405.55		0.0	*
1Q17		1/16/2017	NE	39.59	NA	NA	NA	406.11		1.2	*
2Q17		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	445.70	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		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	311.90 - 309.90 (133.80 - 135.80)	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	*
P 84A											
4Q16		10/5/2016	NE	40.91	NA	NA	NA	405.58		0.6	*
1Q17		1/17/2017	NE	40.34	NA	NA	NA	406.15		0.0	*
2Q17		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	446.49	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		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	397.57 - 382.57 (48.92 - 63.92)	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	*
P 84B											
4Q16		10/5/2016	NE	40.63	NA	NA	NA	405.58		0.0	*
1Q17		1/17/2017	NE	40.08	NA	NA	NA	406.13		0.0	*
2Q17		4/4/2017	NE	40.54	NA	NA	NA	405.67		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	446.21	1/3/2018	NE	40.56	NA	NA	NA	405.65	372.71 - 370.71 (73.50 - 75.50)	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	*
P 84C											
4Q16		10/5/2016	NE	40.66	NA	NA	NA	405.56		7.5	*
1Q17		1/17/2017	NE	40.08	NA	NA	NA	406.14		0.0	*
2Q17		4/4/2017	NE	40.54	NA	NA	NA	405.68		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	446.22	1/3/2018	NE	40.57	NA	NA	NA	405.65	352.17 - 350.17 (94.05 - 96.05)	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	*

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 84D											
4Q16		10/5/2016	NE	40.65	NA	NA	NA	405.59		6.0	*
1Q17		1/17/2017	NM	NM	NA	NA	NA	NA		NM	
2Q17		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	446.24	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		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	325.41 - 323.41 (120.83 - 122.83)	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	*
P 88A											
4Q16		10/5/2016	NE	31.75	NA	NA	NA	411.34		0.0	*
1Q17		1/17/2017	NE	31.75	NA	NA	NA	411.34		0.0	*
2Q17		4/4/2017	NE	32.36	NA	NA	NA	410.73		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	443.09	1/4/2018	NE	32.60	NA	NA	NA	410.49	404.69 - 389.69 (38.40 - 53.40)	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	*
P 88B											
4Q16		10/5/2016	NE	31.82	NA	NA	NA	411.34		0.0	*
1Q17		1/17/2017	NE	31.81	NA	NA	NA	411.35		3.5	*
2Q17		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	443.16	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		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	371.51 - 369.51 (71.65 - 73.65)	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	*
P 88C											
4Q16		10/5/2016	NE	31.75	NA	NA	NA	411.38		0.0	*
1Q17		1/17/2017	NE	31.77	NA	NA	NA	411.36		0.0	*
2Q17		4/4/2017	NE	32.38	NA	NA	NA	410.75		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	443.13	1/4/2018	NE	32.62	NA	NA	NA	410.51	350.83 - 348.83 (92.30 - 94.30)	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	*
P 88D											
4Q16		10/5/2016	NE	31.97	NA	NA	NA	411.23		0.0	*
1Q17		1/17/2017	NE	31.91	NA	NA	NA	411.29		0.0	*
2Q17		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	443.20	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		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	331.03 - 329.03 (112.17 - 114.17)	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	*

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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 89B											
4Q16		10/5/2016	NE	38.84	NA	NA	NA	408.60		0.2	*
1Q17		1/17/2017	NE	38.76	NA	NA	NA	408.68		0.0	*
2Q17		4/4/2017	NE	39.32	NA	NA	NA	408.12		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	447.44	1/4/2018	NE	39.23	NA	NA	NA	408.21	370.08 - 368.08 (77.36 - 79.36)	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	*
P 89C											
4Q16		10/5/2016	NE	39.63	NA	NA	NA	408.13		0.2	*
1Q17		1/17/2017	NE	39.11	NA	NA	NA	408.65		0.0	*
2Q17		4/4/2017	NE	39.66	NA	NA	NA	408.10		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	350.13 - 348.13 (97.63 - 99.63)	0.0	*
1Q18	447.76	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	*
P 89D											
4Q16		10/5/2016	NE	39.18	NA	NA	NA	408.45		0.2	*
1Q17		1/17/2017	NE	39.03	NA	NA	NA	408.60		0.0	*
2Q17		4/4/2017	NE	39.51	NA	NA	NA	408.12		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	447.63	1/4/2018	NE	39.48	NA	NA	NA	408.15	307.29 - 305.29 (140.34 - 142.34)	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	307.49 - 305.49 (140.34 - 142.34)	0.0	*
P 91A											
4Q16		10/4/2016	44.59	44.61	402.63	402.65	0.02	402.65		4.7	*
1Q17		1/16/2017	NE	43.81	NA	NA	NA	403.43		139	*
2Q17		4/4/2017	44.61	44.64	402.60	402.63	0.03	402.62		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	447.24	1/2/2018	44.43	44.45	402.79	402.81	0.02	402.81	395.72 - 380.72 (51.51 - 66.51)	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	*
P 91B											
4Q16		10/4/2016	NE	44.72	NA	NA	NA	402.56		0.7	*
1Q17		1/16/2017	NE	43.93	NA	NA	NA	403.35		2.0	*
2Q17		4/4/2017	NE	44.74	NA	NA	NA	402.54		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	447.28	1/2/2018	NE	44.23	NA	NA	NA	403.05	372.59 - 370.59 (74.69 - 76.69)	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	*

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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											
4Q16		10/4/2016	NE	44.47	NA	NA	NA	402.60		0.4	*
1Q17		1/16/2017	NE	43.62	NA	NA	NA	403.45		0.2	*
2Q17		4/4/2017	NE	44.51	NA	NA	NA	402.56		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	447.07	1/2/2018	NE	44.00	NA	NA	NA	403.07	352.34 - 350.34 (94.73 - 96.73)	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	*
P 91D											
4Q16		10/4/2016	NE	44.46	NA	NA	NA	402.60		0.3	*
1Q17		1/16/2017	NE	43.67	NA	NA	NA	403.39		1.2	*
2Q17		4/4/2017	NE	44.50	NA	NA	NA	402.56		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	447.06	1/2/2018	NE	43.98	NA	NA	NA	403.08	278.74 - 276.74 (168.32 - 170.32)	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	*
P 92A											
4Q16		10/4/2016	42.63	42.71	403.53	403.61	0.08	403.59		11.5	*
1Q17		1/17/2017	42.19	42.22	404.02	404.05	0.03	404.04		42.0	*
2Q17		4/4/2017	42.38	42.40	403.84	403.86	0.02	403.86		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	446.24	1/3/2018	42.91	42.94	403.30	403.33	0.03	403.32	398.67 - 383.67 (47.57 - 62.57)	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	*
P 92B											
4Q16		10/4/2016	NE	42.53	NA	NA	NA	403.65		0.0	*
1Q17		1/17/2017	NE	42.18	NA	NA	NA	404.00		0.0	*
2Q17		4/4/2017	NE	42.36	NA	NA	NA	403.82		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	372.53 - 370.53 (73.65 - 75.65)	0.0	*
1Q18	446.18	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	*
P 92C											
4Q16		10/4/2016	NE	42.52	NA	NA	NA	403.65		0.0	*
1Q17		1/17/2017	NE	42.16	NA	NA	NA	404.01		1.8	*
2Q17		4/4/2017	NE	42.35	NA	NA	NA	403.82		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	446.17	1/3/2018	NE	42.88	NA	NA	NA	403.29	353.21 - 348.21 (92.96 - 97.96)	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	*

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 92D											
4Q16		10/4/2016	NE	42.38	NA	NA	NA	403.62		0.0	*
1Q17		1/17/2017	NE	42.04	NA	NA	NA	403.96		0.0	*
2Q17		4/4/2017	NE	42.19	NA	NA	NA	403.81		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	446.00	1/3/2018	NE	42.70	NA	NA	NA	403.30	305.00 - 303.00 (141.00 - 143.00)	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	*
P 93A											
4Q16		10/3/2016	NE	41.58	NA	NA	NA	403.54		1.9	*
1Q17		1/16/2017	NE	41.04	NA	NA	NA	404.08		7.6	*
2Q17		4/3/2017	NE	41.16	NA	NA	NA	403.96		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	445.12	1/4/2018	NE	42.79	NA	NA	NA	402.33	402.05 - 392.05 (43.07 - 53.07)	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	*
P 93B											
4Q16		10/3/2016	NE	42.93	NA	NA	NA	403.59		0.0	*
1Q17		1/16/2017	NE	42.41	NA	NA	NA	404.11		0.1	*
2Q17		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	446.52	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		0.0	*
3Q18		7/2/2018	NE	45.60	NA	NA	NA	400.92	371.64 - 369.64 (74.88 - 76.88)	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	*
P 93C											
4Q16		10/3/2016	NE	41.73	NA	NA	NA	404.55		0.0	*
1Q17		1/16/2017	NE	42.20	NA	NA	NA	404.08		12.6	*
2Q17		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	446.28	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		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	353.40 - 348.40 (92.88 - 97.88)	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	*
P 93D											
4Q16		10/3/2016	NE	43.12	NA	NA	NA	403.61		0.0	*
1Q17		1/16/2017	NE	42.59	NA	NA	NA	404.14		0.0	*
2Q17		4/3/2017	NE	42.72	NA	NA	NA	404.01		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	446.73	1/3/2018	NE	44.19	NA	NA	NA	402.54	320.98 - 318.98 (125.75 - 127.75)	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	*

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 94											
4Q16		10/3/2016	NE	34.80	NA	NA	NA	410.34		0.0	*
1Q17		1/16/2017	NE	35.04	NA	NA	NA	410.10		0.0	*
2Q17		4/3/2017	NE	35.64	NA	NA	NA	409.50	399.29 - 384.29	0.0	*
3Q17		7/6/2017	NE	33.00	NA	NA	NA	412.14	(45.85 - 60.85)	0.0	*
4Q17		10/3/2017	NE	34.60	NA	NA	NA	410.54		0.0	*
1Q18	445.14	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		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	398.90 - 383.90	0.0	*
1Q19		1/2/2019	NE	39.49	NA	NA	NA	405.65	(46.24 - 61.24)	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	*
P 95											
4Q16		10/5/2016	NE	29.72	NA	NA	NA	413.70		0.1	*
1Q17		1/17/2017	NE	29.71	NA	NA	NA	413.71		6.8	*
2Q17		4/4/2017	NE	30.40	NA	NA	NA	413.02		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	443.42	1/4/2018	NE	30.53	NA	NA	NA	412.89	406.90 - 391.90	0.0	*
2Q18		4/4/2018	NE	32.02	NA	NA	NA	411.40	(36.52 - 51.52)	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	*
P 102											
4Q16		10/5/2016	NE	33.01	NA	NA	NA	411.96		105	*
1Q17		1/17/2017	NE	33.00	NA	NA	NA	411.97		22.3	*
2Q17		4/4/2017	NE	33.68	NA	NA	NA	411.29		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	444.97	1/4/2018	NE	33.41	NA	NA	NA	411.56	402.22 - 382.22 (42.75 - 62.75)	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	*
P 114R											
4Q16		10/4/2016	NE	23.74	NA	NA	NA	405.52		51.0	
1Q17		1/17/2017	NE	24.81	NA	NA	NA	404.45		1.9	
2Q17		4/5/2017	NE	24.93	NA	NA	NA	404.33		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	429.26	1/3/2018	NE	26.16	NA	NA	NA	403.10	406.25 - 396.25 (23.01 - 33.01)	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	*
P 115											
4Q16		10/4/2016	NE	27.61	NA	NA	NA	405.75		0.2	*
1Q17		1/17/2017	NE	28.88	NA	NA	NA	404.48		1.9	*
2Q17		4/5/2017	NE	29.20	NA	NA	NA	404.16		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	433.36	1/3/2018	NE	30.22	NA	NA	NA	403.14	401.06 - 381.06	0.0	*
2Q18		4/4/2018	NE	31.03	NA	NA	NA	402.33	(32.30 - 52.30)	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	*

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 116											
4Q16		10/4/2016	NE	30.96	NA	NA	NA	405.67		0.1	*
1Q17		1/17/2017	NE	32.37	NA	NA	NA	404.26		0.1	*
2Q17		4/5/2017	NE	32.66	NA	NA	NA	403.97		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	436.63	1/3/2018	NE	33.69	NA	NA	NA	402.94	399.19 - 379.19 (37.44 - 57.44)	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	*
P 117											
4Q16		10/4/2016	NE	27.13	NA	NA	NA	405.58		0.1	*
1Q17		1/17/2017	NE	28.55	NA	NA	NA	404.16		0.0	*
2Q17		4/5/2017	NE	28.93	NA	NA	NA	403.78		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	432.71	1/3/2018	NE	29.90	NA	NA	NA	402.81	399.78 - 379.78 (32.93 - 52.93)	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	*
P 118											
4Q16		10/4/2016	NE	25.78	NA	NA	NA	405.53		0.1	*
1Q17		1/17/2017	NE	27.61	NA	NA	NA	403.70		0.6	*
2Q17		4/5/2017	NE	27.92	NA	NA	NA	403.39		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	431.31	1/3/2018	NE	28.99	NA	NA	NA	402.32	400.19 - 384.26 (31.12 - 47.05)	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	*
P 119											
4Q16		10/4/2016	NE	26.32	NA	NA	NA	405.58		0.1	*
1Q17		1/17/2017	NE	26.92	NA	NA	NA	404.98		0.0	*
2Q17		4/5/2017	NE	27.14	NA	NA	NA	404.76		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	431.90	1/3/2018	NE	28.27	NA	NA	NA	403.63	401.23 - 385.30 (30.67 - 46.60)	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	*
P 120											
4Q16		10/4/2016	NE	26.24	NA	NA	NA	406.58		0.0	*
1Q17		1/17/2017	NE	27.37	NA	NA	NA	405.45		0.0	*
2Q17		4/5/2017	NE	27.55	NA	NA	NA	405.27		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	432.82	1/3/2018	NE	28.69	NA	NA	NA	404.13	401.44 - 385.51 (31.38 - 47.31)	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	*

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 129											
4Q16		10/4/2016	NE	27.31	NA	NA	NA	405.12		0.4	*
1Q17		1/17/2017	NE	30.09	NA	NA	NA	402.34		0.0	*
2Q17		4/5/2017	NE	30.17	NA	NA	NA	402.26		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	432.43	1/3/2018	NE	31.67	NA	NA	NA	400.76	400.46 - 384.53 (31.97 - 47.9)	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	*
ROST 3 MW											
4Q16		10/3/2016	NE	38.20	NA	NA	NA	404.09		320	
1Q17		1/11/2017	NE	37.67	NA	NA	NA	404.62		182	*
2Q17		4/3/2017	NE	38.13	NA	NA	NA	404.16		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	442.29	1/3/2018	NE	38.80	NA	NA	NA	403.49	404.48 - 394.48 (37.81 - 47.81)	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	*
ROST 4 PZ											
4Q16		10/3/2016	NE	37.67	NA	NA	NA	404.46		0.5	
1Q17		1/16/2017	NE	36.96	NA	NA	NA	405.17		8.2	
2Q17		4/3/2017	NE	37.35	NA	NA	NA	404.78		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	442.13	1/2/2018	NE	37.88	NA	NA	NA	404.25	407.20 - 397.20 (34.93 - 44.93)	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	
ROST 4 PZ(A)											
4Q16		10/3/2016	NE	36.52	NA	NA	NA	405.59		0.3	
1Q17		1/16/2017	NE	36.23	NA	NA	NA	405.88		0.3	
2Q17		4/3/2017	NE	36.80	NA	NA	NA	405.31		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	442.11	1/2/2018	NE	37.16	NA	NA	NA	404.95	407.34 - 397.34 (34.77 - 44.77)	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	
ROST 4 PZ(B)											
4Q16		10/3/2016	NE	37.54	NA	NA	NA	404.84		0.5	
1Q17		1/16/2017	NE	36.96	NA	NA	NA	405.42		12.0	
2Q17		4/3/2017	NE	37.43	NA	NA	NA	404.95		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	442.38	1/2/2018	NE	37.85	NA	NA	NA	404.53	407.33 - 397.33 (35.05 - 45.05)	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	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
ROST 4 PZ(C)											
4Q16		10/3/2016	NE	38.55	NA	NA	NA	404.11		2.8	
1Q17		1/16/2017	NE	37.88	NA	NA	NA	404.78		9.8	
2Q17		4/3/2017	NE	38.24	NA	NA	NA	404.42		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	442.66	1/2/2018	NE	38.75	NA	NA	NA	403.91	407.71 - 397.71 (34.95 - 44.95)	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	
ROST 4 PZ(D)											
4Q16		10/3/2016	NE	38.41	NA	NA	NA	404.57		14.1	
1Q17		1/16/2017	NE	37.68	NA	NA	NA	405.30		71.9	
2Q17		4/3/2017	NE	38.09	NA	NA	NA	404.89		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	442.98	1/2/2018	NE	38.63	NA	NA	NA	404.35	408.01 - 398.01 (34.97 - 44.97)	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	
ROST 4 PZ(E)											
4Q16		10/3/2016	NE	37.61	NA	NA	NA	404.35		0.8	
1Q17		1/16/2017	NE	36.94	NA	NA	NA	405.02		0.0	
2Q17		4/3/2017	NE	37.28	NA	NA	NA	404.68		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	441.96	1/2/2018	NE	37.85	NA	NA	NA	404.11	407.21 - 397.21 (34.75 - 44.75)	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	
ROST 4 PZ(F)											
4Q16		10/3/2016	NE	37.85	NA	NA	NA	404.27		1.6	
1Q17		1/16/2017	NE	37.20	NA	NA	NA	404.92		0.0	
2Q17		4/3/2017	NE	37.63	NA	NA	NA	404.49		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	442.12	1/2/2018	NE	38.07	NA	NA	NA	404.05	407.59 - 397.59 (34.53 - 44.53)	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	
ROST 4 PZ(G)											
4Q16		10/3/2016	NE	38.29	NA	NA	NA	403.84		0.4	
1Q17		1/16/2017	NE	37.57	NA	NA	NA	404.56		52.7	
2Q17		4/3/2017	NE	37.93	NA	NA	NA	404.20		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	442.13	1/2/2018	NE	38.97	NA	NA	NA	403.16	407.85 - 397.85 (34.28 - 44.28)	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	

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
S 1											
4Q16		10/4/2016	40.22	40.26	403.64	403.68	0.04	403.67		97	
1Q17		1/16/2017	39.30	39.37	404.53	404.60	0.07	404.59		420	
2Q17		4/3/2017	39.35	39.41	404.49	404.55	0.06	404.54		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	443.90	1/3/2018	40.78	40.85	403.05	403.12	0.07	403.11	Unknown	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	
T 1											
4Q16		10/3/2016	NE	40.52	NA	NA	NA	404.88		4.2	*
1Q17		1/16/2017	NE	40.05	NA	NA	NA	405.35		0.0	*
2Q17		4/3/2017	NE	40.51	NA	NA	NA	404.89		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	445.40	1/2/2018	NE	41.16	NA	NA	NA	404.24	398.40 - 388.40 (47.00 - 57.00)	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	*
T 2											
4Q16		10/3/2016	NE	38.69	NA	NA	NA	404.52		0.0	*
1Q17		1/16/2017	NE	37.95	NA	NA	NA	405.26		0.0	*
2Q17		4/3/2017	NE	38.30	NA	NA	NA	404.91		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	443.21	1/2/2018	NE	38.82	NA	NA	NA	404.39	392.72 - 372.56 (50.49 - 70.64)	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	*
T 3											
4Q16		10/4/2016	NE	45.41	NA	NA	NA	403.62		0.0	
1Q17		1/17/2017	NE	44.71	NA	NA	NA	404.32		0.0	*
2Q17		4/3/2017	NE	45.05	NA	NA	NA	403.98		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	449.03	1/2/2018	45.43	45.44	403.59	403.60	0.01	403.60	403.81 - 388.81 (45.22 - 60.22)	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	
T 4											
4Q16		10/4/2016	NE	42.80	NA	NA	NA	403.83		0.0	*
1Q17		1/17/2017	NE	42.50	NA	NA	NA	404.13		0.0	*
2Q17		4/4/2017	NE	42.98	NA	NA	NA	403.65		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	398.32 - 383.32 (48.31 - 63.31)	0.0	*
1Q18	446.63	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	*

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 5											
4Q16		10/5/2016	NE	38.99	NA	NA	NA	404.48		28.5	*
1Q17		1/16/2017	NE	38.38	NA	NA	NA	405.09		2.6	*
2Q17		4/3/2017	NE	38.36	NA	NA	NA	405.11		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	443.47	1/3/2018	NE	39.45	NA	NA	NA	404.02	395.14 - 378.59 (48.33 - 64.88)	3.0	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at we l - 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	*
T 6											
4Q16		10/3/2016	NE	43.09	NA	NA	NA	403.52		4.0	*
1Q17		1/16/2017	NE	42.50	NA	NA	NA	404.11		5.6	*
2Q17		4/3/2017	NE	42.71	NA	NA	NA	403.90		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	394.85 - 380.60 (51.76 - 66.01)	0.2	*
1Q18	446.61	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	*
T 7											
4Q16		10/4/2016	NE	38.65	NA	NA	NA	405.39		0.5	*
1Q17		1/17/2017	NE	38.52	NA	NA	NA	405.52		2.5	*
2Q17		4/4/2017	NE	38.84	NA	NA	NA	405.20		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	444.04	1/4/2018	39.98	39.99	404.05	404.06	0.01	404.06	395.32 - 380.32 (48.72 - 63.72)	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	*
T 12											
4Q16		10/3/2016	NE	41.61	NA	NA	NA	403.19		7.8	*
1Q17		1/16/2017	NE	40.70	NA	NA	NA	404.10		1.7	*
2Q17		4/3/2017	NE	40.86	NA	NA	NA	403.94		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	444.80	1/3/2018	NE	42.06	NA	NA	NA	402.74	397.97 - 371.97 (46.83 - 72.83)	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	*
T 13											
4Q16		10/3/2016	NE	38.56	NA	NA	NA	405.40		0.5	*
1Q17		1/16/2017	NE	38.06	NA	NA	NA	405.90		0.4	*
2Q17		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	443.96	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		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	400.15 - 374.15 (43.81 - 69.81)	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	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T 15											
4Q16	445.14	10/3/2016	NE	40.44	NA	NA	NA	404.70	397.10 - 371.10 (48.04 - 74.04)	5.2	*
1Q17		1/16/2017	NE	39.71	NA	NA	NA	405.43		0.0	*
2Q17		4/3/2017	NE	40.08	NA	NA	NA	405.06		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	*
T 17											
4Q16	446.01	10/3/2016	NE	38.45	NA	NA	NA	407.56	401.91 - 375.91 (44.10 - 70.10)	0.0	*
1Q17		1/16/2017	NE	38.11	NA	NA	NA	407.90		0.0	*
2Q17		4/3/2017	NE	38.42	NA	NA	NA	407.59		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	*
T 19											
4Q16	446.79	10/4/2016	NE	42.40	NA	NA	NA	404.39	396.02 - 370.02 (50.77 - 76.77)	0.6	*
1Q17		1/17/2017	NE	42.63	NA	NA	NA	404.16		3.1	*
2Q17		4/4/2017	NE	43.04	NA	NA	NA	403.75		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	*
T 21											
4Q16	443.99	10/5/2016	NE	29.87	NA	NA	NA	414.12	412.03 - 386.03 (31.96 - 57.96)	0.0	*
1Q17		1/17/2017	NE	29.97	NA	NA	NA	414.02		0.0	*
2Q17		4/4/2017	NE	30.65	NA	NA	NA	413.34		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	*

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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											
4Q16		10/4/2016	NE	31.49	NA	NA	NA	410.70		0.1	*
1Q17		1/17/2017	NE	31.82	NA	NA	NA	410.37		0.0	
2Q17		4/4/2017	NE	32.43	NA	NA	NA	409.76		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	442.19	1/4/2018	NE	32.91	NA	NA	NA	409.28	410.64 - 384.94 (31.55 - 57.25)	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	*
T 23											
4Q16		10/5/2016	NE	24.18	NA	NA	NA	408.51		0.0	*
1Q17		1/16/2017	NE	24.61	NA	NA	NA	408.08		0.0	*
2Q17		4/4/2017	NM	NM	NA	NA	NA	NA		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	432.69	1/3/2018	NE	26.07	NA	NA	NA	406.62	405.46 - 379.46 (27.23 - 53.23)	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	*
T 24											
4Q16		10/4/2016	NE	39.88	NA	NA	NA	403.93		6.0	*
1Q17		1/16/2017	NE	39.11	NA	NA	NA	404.70		9.0	*
2Q17		4/3/2017	39.41	39.97	403.84	404.40	0.56	404.29		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	443.81	1/2/2018	40.49	40.57	403.24	403.32	0.08	403.30	402.31 - 376.66 (41.50 - 67.15)	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	*
T 28											
4Q16		10/3/2016	NE	38.60	NA	NA	NA	405.83		0.0	
1Q17		1/16/2017	NE	38.05	NA	NA	NA	406.38		0.0	
2Q17		4/3/2017	NE	38.42	NA	NA	NA	406.01		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	444.43	1/3/2018	NE	38.57	NA	NA	NA	405.86	Unknown	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	
T 37											
4Q16		10/5/2016	NE	38.67	NA	NA	NA	408.58		0.2	*
1Q17		1/17/2017	NE	38.58	NA	NA	NA	408.67		0.0	*
2Q17		4/4/2017	NE	39.15	NA	NA	NA	408.10		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	447.25	1/4/2018	NE	39.08	NA	NA	NA	408.17	398.40 - 378.40 (48.85 - 68.85)	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	*

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 38											
4Q16		10/5/2016	NE	35.60	NA	NA	NA	410.07		0.2	*
1Q17		1/17/2017	NE	35.86	NA	NA	NA	409.81		0.0	*
2Q17		4/4/2017	NE	36.49	NA	NA	NA	409.18		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	445.67	1/4/2018	NE	36.13	NA	NA	NA	409.54	396.53 - 376.53 (49.14 - 69.14)	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	*
T 62											
4Q16		10/4/2016	NE	25.75	NA	NA	NA	406.24		0.3	
1Q17		1/17/2017	NE	26.70	NA	NA	NA	405.29		0.0	
2Q17		4/5/2017	NE	27.25	NA	NA	NA	404.74		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	431.99	1/3/2018	NE	28.34	NA	NA	NA	403.65	412.28 - 382.28 (19.71 - 49.71)	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	
T 63											
4Q16		10/4/2016	NE	25.42	NA	NA	NA	406.01		0.1	
1Q17		1/17/2017	NE	26.49	NA	NA	NA	404.94		0.0	
2Q17		4/5/2017	NE	27.02	NA	NA	NA	404.41		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	431.43	1/3/2018	NE	27.82	NA	NA	NA	403.61	411.45 - 381.45 (19.98 - 49.98)	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	
T 64											
4Q16		10/4/2016	NE	23.11	NA	NA	NA	405.82		153	
1Q17		1/17/2017	NE	24.91	NA	NA	NA	404.02		0.0	
2Q17		4/5/2017	NE	25.13	NA	NA	NA	403.80		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	428.93	1/3/2018	NE	26.04	NA	NA	NA	402.89	409.12 - 379.12 (19.81 - 49.81)	0.0	
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at we l - 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	*

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 were adjusted based on the survey performed in accordance with Permit Condition IV.J.9, which requires wells be surveyed every five (5) years.

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							
4Q16	6.87	18.30	1.460	23.57	0.10	-30.0	
1Q17	6.77	17.43	1.106	13.19	0.03	208.0	
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	
MW-02							
4Q16	7.09	20.46	1.549	11.28	0.00	-236.0	
1Q17	7.09	18.30	1.294	14.73	0.03	-155.0	
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	
MW-03							
4Q16	7.03	19.96	1.571	37.09	0.00	-145.0	
1Q17	6.85	17.98	1.049	49.63	0.02	-146.0	
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	
MW-04							
4Q16	6.94	19.30	1.428	20.61	0.06	-142.0	
1Q17	6.82	17.67	1.351	5.68	0.06	-115.0	
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	

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-05							
4Q16	6.87	19.18	1.341	11.01	0.03	-143.0	
1Q17	6.87	15.78	0.807	6.10	0.07	-122.0	
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	
MW-06A							
4Q16	6.87	19.44	1.147	7.93	0.08	-122.0	
1Q17	6.92	18.80	0.987	9.75	8.79	-94.0	
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	
MW-06B							
4Q16	7.02	19.74	0.840	3.87	0.11	-111.0	
1Q17	7.19	18.73	0.753	4.10	8.78	-91.0	
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	
MW-06C							
4Q16	7.15	20.17	1.008	1.97	0.10	-144.0	
1Q17	7.10	18.23	0.913	2.52	8.80	-105.0	
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	

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-06D							
4Q16	7.16	19.46	1.241	36.29	0.01	-151.0	
1Q17	6.94	17.80	1.078	12.57	*	-110.0	
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	
MW-07							
4Q16	6.78	20.75	1.422	24.73	0.13	-92.0	
1Q17	6.71	15.42	1.442	111.50	0.21	-83.0	
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	
MW-08							
4Q16	6.81	21.24	1.743	31.41	0.07	-107.0	
1Q17	6.74	18.78	1.635	11.08	0.12	-110.0	
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	
MW-09							
4Q16	6.79	17.62	1.455	14.71	0.11	-69.0	
1Q17	6.93	17.59	1.073	17.99	0.06	159.0	
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	

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							
4Q16	7.02	19.36	2.046	16.44	0.07	-125.0	
1Q17	7.04	17.38	1.644	27.80	0.01	162.0	
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	
MW-11							
4Q16	6.82	17.79	1.534	6.21	0.11	-98.0	
1Q17	6.82	16.45	1.204	6.15	0.07	16.0	
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	
MW-12							
4Q16	6.95	19.17	1.295	5.98	0.08	87.0	
1Q17	6.73	16.81	1.061	3.98	0.13	147.0	
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	
MW-13							
4Q16	6.81	20.22	1.441	26.44	0.12	-119.0	
1Q17	6.70	17.16	1.168	15.96	0.04	-125.0	
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	

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-14							
4Q16	6.79	17.71	1.118	13.86	0.00	-73.0	
1Q17	6.76	18.10	1.012	26.18	0.18	-89.0	
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	
MW-16							
4Q16	6.83	19.49	1.540	10.15	0.18	-41.0	
1Q17	6.75	17.01	1.194	2.08	0.31	90.0	
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	
MW-22							
4Q16	6.76	21.13	1.492	21.54	0.03	-91.0	
1Q17	7.03	19.09	1.183	3.78	0.02	162.0	
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.
MW-23							
4Q16	6.65	19.14	1.265	34.01	0.03	-93.0	
1Q17	6.53	18.20	1.120	28.38	0.00	-50.0	
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	

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-24							
4Q16	6.92	20.22	1.313	10.10	0.30	103.0	
1Q17	6.98	17.09	1.324	5.77	0.26	17.1	
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	
MW-25							
4Q16	6.96	21.08	1.219	6.03	0.10	-140.0	
1Q17	6.80	17.70	1.211	8.81	0.08	-119.0	
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	
MW-26							
4Q16	6.88	19.74	1.340	14.49	0.11	-26.0	
1Q17	6.71	16.76	1.300	6.94	0.77	73.0	
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	
MW-27							
4Q16	6.99	18.57	0.949	32.47	0.86	-24.0	
1Q17	7.01	15.97	0.812	17.30	0.34	349.0	
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	

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							
4Q16	6.75	18.43	1.855	10.58	0.00	-14.0	
1Q17	6.75	16.85	1.405	24.28	0.06	180.0	
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	
P-54							
4Q16	6.82	18.16	1.180	5.41	4.98	194.0	
1Q17	6.87	16.33	0.958	10.33	2.70	167.0	
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	
P-55R							
4Q16	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.
P-56							
4Q16	7.09	24.16	1.861	19.56	0.00	-144.0	
1Q17	7.02	18.76	1.819	13.42	0.00	-136.0	
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	

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-57							
4Q16	6.88	23.87	1.511	6.36	0.05	-143.0	
1Q17	6.87	20.19	1.513	3.72	0.12	-129.0	
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	
P-58							
4Q16	6.69	24.48	2.648	15.56	0.05	-123.0	
1Q17	6.72	21.85	2.345	28.06	0.00	-111.0	
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	
P-59							
4Q16	6.67	27.37	1.525	8.42	0.03	-121.0	
1Q17	6.60	23.06	1.837	6.23	0.10	-125.0	
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.
P-66							
4Q16	6.64	21.18	1.419	13.50	0.02	-111.0	
1Q17	6.65	20.64	1.191	13.13	0.08	-102.0	
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	

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							
4Q16	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
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.
P-74							
4Q16	7.02	21.43	0.298	1.78	0.00	-185.0	
1Q17	6.62	14.73	0.232	4.84	0.25	-38.0	
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	
P-93A							
4Q16	6.79	20.53	1.563	5.17	2.09	105.0	
1Q17	6.77	17.21	1.521	18.27	0.20	68.0	
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	
P-93B							
4Q16	6.94	18.70	1.357	8.97	0.88	-99.0	
1Q17	6.80	17.46	1.337	18.77	0.20	-121.0	
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	

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-93C							
4Q16	6.93	19.28	1.278	7.37	0.15	-72.0	
1Q17	7.04	18.32	1.309	30.61	0.12	-91.0	
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	
P-93D							
4Q16	7.12	20.21	1.478	28.86	2.05	-125.0	
1Q17	6.51	15.16	1.447	15.58	4.10	-77.0	
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	
P-114R							
4Q16	6.83	21.50	1.094	16.25	0.03	-127.0	
1Q17	6.80	16.52	0.803	29.92	0.22	-76.0	
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	
ROST-3-MW							
4Q16	7.01	17.52	1.283	8.93	0.00	-152.0	
1Q17	6.82	17.39	1.354	12.89	0.05	48.0	
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	

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
ROST-4-PZ(C)							
4Q16	7.31	18.20	1.575	8.38	0.00	-241.0	
1Q17	7.38	16.15	1.351	12.10	0.15	68.0	
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	
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	
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	
T-12							
4Q16	6.91	26.26	1.268	12.90	0.04	-135.0	
1Q17	6.90	20.47	1.213	4.88	0.11	-125.0	
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	

NOTES:

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

2) NM = Not Measured

3) * = Equipment malfunction. Results are suspect.

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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101316	10/13/2016	48.80 - 58.80	38.79	NE	<0.025	<0.001	<0.001	<0.025	<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	<0.001	<0.001
	MW1-ROX-011217	1/12/2017		38.35	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW1-ROX-041717	4/17/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001	<0.001	<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	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW1-ROX-071119	7/11/2019	48.80 - 58.80	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-02	MW2-ROX-101316	10/13/2016	49.87 - 59.87	40.10	NE	<0.025	0.013	<0.001	0.013 J	0.0036	0.0027	<0.001	<0.001	<0.001	<0.001	0.0032	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.13	<0.001	0.036	<0.025	<0.001	0.016	0.044	<0.001	<0.001
	MW2-ROX-011217	1/12/2017		39.58	NE	<0.025	0.016	<0.001	<0.025	<0.001	0.0059	<0.001	0.0039	<0.001	<0.001	0.007	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.097	<0.001	0.055	<0.025	<0.001	0.015	0.07	<0.001	<0.001
	MW2-ROX-041717	4/17/2017		39.69	NE	<0.13	0.0062	<0.005	0.026 J	0.0088	0.0055	<0.005	<0.005	<0.005	<0.005	0.006	<0.000031	<0.000021	<0.005	<0.005	<0.005	0.62	<0.005	0.075	<0.13	<0.005	0.053	0.094	<0.005	<0.005
	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	0.0062	<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	<0.001	<0.001
	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	0.0065	0.00012	<0.00002	<0.005	<0.005	<0.005	0.51	<0.005	0.07	<0.13	<0.005	0.035	0.099	<0.005	<0.005
	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	0.0057	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.087	<0.001	0.049	<0.025	<0.001	0.01	0.069	<0.001	<0.001
	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	0.0018	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.22	<0.001	0.026	<0.025	<0.001	0.036	0.033	<0.001	<0.001
	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	0.0052	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.077	<0.001	0.052	<0.025	<0.001	0.01	0.073	<0.001	<0.001
	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	0.0036	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.11	<0.001	0.035	<0.025	<0.001	0.011	0.049	<0.001	<0.001
	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	0.0037	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.13	<0.001	0.035	<0.025	<0.001	0.013	0.05	<0.001	<0.001
	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	0.0054	<0.000031	<0.000021	<0.002	<0.002	<0.002	0.22	<0.002	0.061	<0.05	<0.002	0.023	0.083	<0.002	<0.002
	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	0.0055	<0.000031	<0.000021	<0.002	<0.002	<0.002	0.21	<0.002	0.061	<0.05	<0.002	0.023	0.085	<0.002	<0.002
	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	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.64	<0.005	0.042	<0.13	<0.005	0.041	0.05	<0.005	<0.005
	MW2-ROX-070919	7/9/2019	49.87 - 59.87	37.86	NE	<0.13	<0.005	<0.005	<0.13	0.011	0.0066	<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	<0.005	<0.005
MW-03	MW3-ROX-100716	10/7/2016	34.67 - 44.67	25.79	NE	<0.025	<0.001	<0.001	<0.025	<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	0.0042	<0.025	0.0036	<0.001	0.0085	<0.001	<0.001
	MW3-ROX-010617	1/6/2017		25.65	NE	0.015 J	0.0011	<0.001	<0.025	0.00078 J	0.0016	0.0013	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0035	<0.001	0.019	<0.025	0.0051	<0.001	0.045	<0.001	<0.001
	MW3-ROX-041117	4/11/2017		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	<0.000031 UJ	<0.00002 UJ	<0.001	<0.001	<0.001	0.0011	<0.001	0.0098	<0.025	0.0035	<0.001	0.02	<0.001	<0.001
	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0026	<0.025	0.0028	<0.001	0.0078	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.00087 J	<0.025	0.0026	<0.001	0.002	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0046	<0.025	0.0026	<0.001	0.0091	<0.001	<0.001
	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0028	<0.025	0.0027	<0.001	0.0082	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.025	<0.001	<0.001	0.0087	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0022	<0.025	0.0019	<0.001	0.0066	<0.001	<0.001
	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	<0.000029	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.025	<0.001	<0.001	0.0058	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW3-ROX-071019	7/10/2019	34.67 - 44.67	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.0037	<0.001	0.013	<0.025	<0.001	<0.001	0.036	<0.001	<0.001
MW-04	MW4-ROX-100616	10/6/2016	45.06 - 55.06	37.18	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.025	0.0073	<0.001	<0.001	<0.001	<0.001
	MW4-ROX-010917	1/9/2017		36.84	NE	<0.025	0.00039 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0045	<0.001	<0.001	<0.001	<0.001
	MW4-ROX-041017	4/10/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0078	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0037	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0036	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0039	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0032	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0031	<0.001	<0.001	<0.001	<0.001
	MW4-ROX-070819	7/8/2019	45.06 - 55.06	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0033	<0.001	<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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101016	10/10/2016	33.97 - 43.97	25.47	NE	<0.025	<0.001	<0.001	<0.025	<0.001	0.00077 J	0.0044	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.025	0.0079	<0.001	<0.001	<0.001	<0.001
	MW5-ROX-010617	1/6/2017		25.33	NE	<0.025	0.0011	<0.001	<0.025	<0.001	0.0013	0.0034	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0074	<0.025	0.0014	<0.001	0.00096 J	<0.001	<0.001
	MW5-ROX-041217	4/12/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0034	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0026	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.001	<0.025	0.0014	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0011	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0023	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001	<0.001	<0.001
	MW5-ROX-071219	7/12/2019	33.97 - 43.97	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0068	<0.001	0.0027	<0.025	0.0028	<0.001	0.0027	<0.001	<0.001
MW-06A	MW6A-ROX-101116	10/11/2016	34.83 - 44.83	27.51	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0027	<0.001	<0.001	<0.001	<0.001
	MW6A-ROX-011017	1/10/2017		27.43	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0022	<0.001	<0.001	<0.001	<0.001
	MW6A-ROX-041217	4/12/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0018	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0021	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0012	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0015	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00093 J	<0.001	<0.001	<0.001	<0.001
	MW6A-ROX-071119	7/11/2019	33.85 - 43.85	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-06B	MW6B-ROX-101116	10/11/2016	64.05 - 69.05	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6B-ROX-011017	1/10/2017		27.49	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6B-ROX-041217	4/12/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6B-ROX-071119	7/11/2019	64.05 - 69.05	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-06C	MW6C-ROX-101016	10/10/2016	84.95 - 89.95	27.37	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6C-ROX-011017	1/10/2017		27.26	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	MW6C-ROX-041217	4/12/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6C-ROX-071119	7/11/2019	84.95 - 89.95	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101016	10/10/2016	104.72 - 109.72	27.26	NE	<0.025	0.0041	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	MW6D-ROX-101016-DUP	10/10/2016		27.26	NE	<0.025	0.0044	<0.001	<0.025	<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	<0.001	<0.001
	MW6D-ROX-011017	1/10/2017		27.14	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6D-ROX-011017-DUP	1/10/2017		27.14	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6D-ROX-041217	4/12/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW6D-ROX-071119	7/11/2019	104.72 - 109.72	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-07	MW7-ROX-100616	10/6/2016	42.92 - 52.92	39.24	NE	<250	910	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW7-ROX-100616-DUP	10/6/2016		39.24	NE	<250	840	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW7-ROX-010917	1/9/2017		38.90	NE	<130	950	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW7-ROX-041017	4/10/2017		38.92	NE	<25	1000	<1	<25	<1	<1	<1	<1	<1	<1	<1	0.00012 p J	0.000042 J	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<25	1100	<1	<25	<1	<1	<1	<1	<1	<1	<1	0.00012 p J	0.000052 J	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW7 ROX-071117	7/11/2017		37.79	NE	<130	810	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<130	870	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW7-ROX-100517	10/5/2017		38.45	NE	<130	1400	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW7-ROX-010918	1/9/2018		40.67	NE	<130	1500	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW7-ROX-040918	4/9/2018		41.38	NE	<25	780	<1	<25	<1	<1	<1	<1	<1	<1	<1	0.000049	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<25	770	<1	<25	<1	<1	<1	<1	<1	<1	<1	0.000056	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW7-ROX-071018	7/10/2018		41.64	NE	<250	1900	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.000029	<0.000019	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<250	1700	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.000031	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<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	<0.000032	<0.000021	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<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	<0.000031	<0.000021	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW7-ROX-040819	4/8/2019		40.94	NE	<250	1000	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<250	1000	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW7-ROX-070819	7/8/2019	42.92 - 52.92	36.58	NE	<25	1300	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000031	<0.00002	<1	<1	<1	0.52 J	<1	<1	<25	<1	<1	<1	<1	<1
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<25	1400	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
MW-08	MW8-ROX-100616	10/6/2016	33.60 - 43.60	29.99	NE	<130	630	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW8-ROX-010917	1/9/2017		29.79	NE	<63	410	<2.5	<63	<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	<2.5	<2.5
	MW8-ROX-041017	4/10/2017		30.02	NE	<25	830	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000031 UJ	<0.000021 UJ	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW8-ROX-071017	7/10/2017		28.48	NE	<25	870	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW8-ROX-100517	10/5/2017		29.28	NE	<250	970	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<250	990	<10	<250	<10	<10	<10	<10	<10	<10	<10	<0.000031	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	<10
	MW8-ROX-010918	1/9/2018		31.60	NE	<130	720	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.000029	<0.000019	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	MW8-ROX-040918	4/9/2018		32.27	NE	<25	510	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	MW8-ROX-071018	7/10/2018		32.42	NE	<130	840	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<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	<0.00003	<0.00002	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<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	<0.000031	<0.000021	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<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	<0.00003	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2	<2	<2
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<50	450	<2	<50	<2	<2	<2	<2	<2	<2	<2	<0.000029	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<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	<0.00003	<0.00002	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<2.5	<2.5	<2.5
	MW8-ROX-070819	7/8/2019	33.60 - 43.60	27.15	NE	<13	280	<0.5	<13	<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	<0.5	<0.5

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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101316	10/13/2016	46.45 - 56.45	40.39	NE	<0.025	0.0024	<0.001	<0.025	<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	<0.001	<0.001
	MW9-ROX-011117	1/11/2017		40.06	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW9-ROX-041417	4/14/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000099	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW9-ROX-071019	7/10/2019	46.04 - 56.04	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-10	MW10-ROX-101216	10/12/2016	44.43 - 54.43	40.27	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW10-ROX-011117	1/11/2017		39.88	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW10-ROX-041417	4/14/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW10-ROX-071219	7/12/2019	44.43 - 54.43	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-11	MW11-ROX-101216	10/12/2016	41.66 - 51.66	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	<0.000029	<0.000029	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW11-ROX-011117	1/11/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW11-ROX-041417	4/14/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW11-ROX-070919	7/9/2019	41.66 - 51.66	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	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-12	MW12-ROX-101116	10/11/2016	41.92 - 51.92	38.85	NE	<0.025	<0.001	<0.001	<0.025	<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	<0.001	<0.001
	MW12-ROX-010917	1/9/2017		38.11	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	MW12-ROX-041417	4/14/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW12-ROX-071019	7/10/2019	41.92 - 51.92	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																					
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-100716	10/7/2016	25.57 - 35.57	25.16	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0076	<0.001	<0.001	<0.001	<0.001
	MW13-ROX-010617	1/6/2017		25.54	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0067	<0.001	<0.001	<0.001	<0.001
	MW13-ROX-041317	4/13/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0055	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0067	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0035	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.004	<0.001	<0.001	<0.001	<0.001
	MW13-ROX-070918	7/9/2018		27.60	NE	0.017 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0044	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0033	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001 UJ	<0.001	<0.025 UJ	0.0045	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001	<0.001	<0.001
	MW13-ROX-070919	7/9/2019	24.80 - 34.80	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001	<0.001	<0.001
MW-14	MW14-ROX-101416	10/14/2016	33.42 - 43.42	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW14-ROX-011117	1/11/2017		29.61	NE	<0.025	0.0019	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	MW14-ROX-041317	4/13/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.00085 J	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.00057 J	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW14-ROX-071019	7/10/2019	33.42 - 43.42	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-16	MW16-ROX-101116	10/11/2016	37.06 - 47.06	39.64	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW16-ROX-010917	1/9/2017		39.15	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW16-ROX-041417	4/14/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW16-ROX-070919	7/9/2019	37.50 - 47.50	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	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-22	MW22-ROX-101716	10/17/2016	37.88 - 47.88	38.17	NE	<0.25	0.31	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.86	<0.01	0.031	<0.25	<0.01	0.11	0.063	<0.01	<0.01
	MW22-ROX-101716-DUP	10/17/2016		38.17	NE	<0.25	0.31	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.89	<0.01	0.034	<0.25	<0.01	0.097	0.061	<0.01	<0.01
	MW22-ROX-011217	1/12/2017		37.80	NE	<0.062 U	0.039	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.000031	<0.00002	<0.005	<0.005	<0.005	0.3	<0.005	0.018	<0.13	<0.005	0.057	0.033	<0.005	<0.005
	MW22-ROX-011217-DUP	1/12/2017		37.80	NE	0.065 J	0.036	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.28	<0.005	0.017	<0.13	<0.005	0.055	0.029	<0.005	<0.005
	MW22-ROX-041717	4/17/2017		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	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.89	<0.01	0.032	<0.25	<0.01	0.099	0.057	<0.01	<0.01
	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.98	<0.01	0.034	<0.25	<0.01	0.11	0.062	<0.01	<0.01
	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	<0.00003	<0.00002	<0.002	<0.002	<0.002	0.17	<0.002	0.0092	<0.05	<0.002	0.031	0.012	<0.002	<0.002
	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	<0.00003	<0.00002	<0.002	<0.002	<0.002	0.15	<0.002	0.0088	<0.05	<0.002	0.029	0.011	<0.002	<0.002
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.04	<0.001	0.0021	<0.025	<0.001	0.015	0.004	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.033	<0.001	0.0018	<0.025	<0.001	0.014	0.0035	<0.001	<0.001
	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	<0.00003	<0.00002	<0.025	<0.025	<0.025	1.5	<0.025	0.05	<0.63	<0.025	0.19	0.1	<0.025	<0.025
	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	<0.00003	<0.00002	<0.025	<0.025	<0.025	1.6	<0.025	0.059	<0.63	<0.025	0.24	0.11	<0.025	<0.025
	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	<0.000029	<0.00002	<0.02	<0.02	<0.02	1.8	<0.02	0.052	<0.5	<0.02	0.16	0.078	<0.02	<0.02
	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	<0.000029	<0.000019	<0.025	<0.025	<0.025	2	<0.025	0.057	<0.63	<0.025	0.2	0.094	<0.025	<0.025
	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	1.5	<0.01	0.066	<0.25	<0.01	0.21	0.12	<0.01	<0.01
	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	<0.00003	0.000022 p J	<0.025	<0.025	<0.025	1.3	<0.025	0.056	<0.63	<0.025	0.14	0.1	<0.025	<0.025
	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	<0.00003	<0.00002	<0.025	<0.025	<0.025	2	<0.025	0.081	<0.63	<0.025	0.2	0.13	<0.025	<0.025

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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-100716	10/7/2016	29.02 - 39.02	26.64	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.001	<0.001	<0.001	<0.001	<0.001
	MW23-ROX-011017	1/10/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW23-ROX-041117	4/11/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW23-ROX-070918	7/9/2018		29.10	NE	0.013 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	0.0011	<0.005	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00088 J	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW23-ROX-071019	7/10/2019	29.02 - 39.02	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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001	<0.001	<0.001
MW-24	MW24-ROX-101116	10/11/2016	38.89 - 48.89	39.19	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW24-ROX-010917	1/9/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW24-ROX-041717	4/17/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW24-ROX-070919	7/9/2019	39.61 - 49.61	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-25	MW25-ROX-100616	10/6/2016	35.59 - 45.59	34.27	NE	<0.05	0.37	<0.002	<0.05	<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	0.039	<0.002	<0.002	<0.002	<0.002
	MW25-ROX-011117	1/11/2017		34.00	NE	<0.025	0.28	<0.001	<0.025	<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	0.00059 J	<0.025	0.025	<0.001	<0.001	<0.001	<0.001
	MW25-ROX-041117	4/11/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.023	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.02	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.016	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0068	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0022	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00099 J	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0023	<0.001	<0.001	<0.001	<0.001
	MW25-ROX-070819	7/8/2019	35.59 - 45.59	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001	<0.001	<0.001
MW-26	MW26-ROX-101016	10/10/2016	38.15 - 48.15	37.13	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW26-ROX-010617	1/6/2017		36.74	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW26-ROX-041417	4/14/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW26-ROX-071019	7/10/2019	38.15 - 48.15	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101216	10/12/2016	39.79 - 49.79	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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW27-ROX-011117	1/11/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW27-ROX-041417	4/14/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	0.00052 J	<0.001	<0.001	<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	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	MW27-ROX-070919	7/9/2019	39.79 - 49.79	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
MW-28	MW28-ROX-101316	10/13/2016	33.61 - 43.61	37.86	NE	0.01 J	0.0066	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.025	0.0011	<0.001	<0.001	<0.001	<0.001
	MW28-ROX-011217	1/12/2017		37.14	NE	<0.025	0.14	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.025	0.0028	<0.001	<0.001	<0.001	<0.001
	MW28-ROX-041717	4/17/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.004	<0.001	0.0041	<0.025	0.00098 J	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	0.00063 J	<0.001	0.0025	<0.025	0.003	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.025	0.0031	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0044	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001	<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	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.005	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0084	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0096	<0.001	<0.001	<0.001	<0.001
	MW28-ROX-071019	7/10/2019	33.61 - 43.61	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0048	<0.001	<0.001	<0.001	<0.001
P-54	P54-ROX-101216	10/12/2016	38.00 - 63.00	37.85	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	P54-ROX-010917	1/9/2017		37.80	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	P54-ROX-041717	4/17/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	P54-ROX-070919	7/9/2019	38.00 - 63.00	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
P-56	P56-ROX-101716	10/17/2016	40.82 - 65.82	42.35	NE	0.047	0.019	<0.001	0.014 J	0.0018	0.0022	0.00076 J	<0.001	<0.001	<0.001	0.0017	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.051	<0.001	0.031	<0.025	<0.001	0.023	0.036	<0.001	<0.001
	P56-ROX-011217	1/12/2017		42.01	NE	<0.025	0.015	<0.001	<0.025	<0.001	0.0022	<0.001	0.0005 J	<0.001	<0.001	0.0017	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.017	<0.001	0.028	<0.025	<0.001	0.012	0.031	<0.001	<0.001
	P56-ROX-040617	4/6/2017		42.46	NE	<0.025	0.012	<0.001	0.0097 J	<0.001	0.0022	<0.001	<0.001	<0.001	<0.001	0.0016	<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	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0089	0.0028	0.013	<0.025	<0.001	0.0054	0.015	<0.001	<0.001
	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	0.0011	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.034	<0.001	0.022	<0.025	<0.001	0.017	0.025	<0.001	<0.001
	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	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.072	<0.005	0.028	<0.13	<0.005	0.018	0.03	<0.005	<0.005
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0014	<0.001	0.02	<0.025	<0.001	0.0019	0.023	<0.001	<0.001
	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	0.0015	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.015	<0.001	0.026	<0.025	<0.001	0.0067	0.027	<0.001	<0.001
	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	0.00082 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	<0.001	<0.001
	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	0.0009 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	<0.001	<0.001
	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	0.0015	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.014	<0.001	0.026	<0.025	<0.001	0.0043	0.027	<0.001	<0.001
	P56-ROX-071219	7/12/2019	40.82 - 65.82	40.50	NE	0.099	0.0064	<0.001	0.11	0.0024	0.0026	<0.001	0.0009 J	<0.001	<0.001	0.0019	<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	<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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101816	10/18/2016	44.19 - 54.19	43.17	NE	<13	71	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000031	<0.000021	<0.5	<0.5	<0.5	0.3 J	<0.5	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5
	P57-ROX-011617	1/16/2017		42.82	NE	<6.3	39	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.00003	<0.00002	<0.25	<0.25	<0.25	0.24 J	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25
	P57-ROX-040717	4/7/2017		43.05	NE	<5	45	<0.2	<5	<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	<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	<0.00003	<0.00002	<0.2	<0.2	<0.2	0.18 J	<0.2	<0.2	<5	<0.2	<0.2	<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	<0.000029	<0.000019	<0.25	<0.25	<0.25	0.21 J	<0.25	<0.25	<6.3	<0.25	<0.25	<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	<0.000029	<0.000019	<0.1	<0.1	<0.1	0.053 J	<0.1	<0.1	<2.5	<0.1	<0.1	<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	<0.000029	<0.000019	<0.1	<0.1	<0.1	0.071 J	<0.1	<0.1	<2.5	<0.1	<0.1	<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	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<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	<0.00003	<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	<0.05	<0.05
	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	<0.00003	<0.00002	<0.05	<0.05	<0.05	0.036 J	<0.05	<0.05	<1.3	<0.05	0.071	0.038 J	<0.05	<0.05
	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	<0.000029	<0.000019	<0.2	<0.2	<0.2	0.15 J	<0.2	<0.2	<5	<0.2	<0.2	<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	<0.000029	<0.000019	<0.2	<0.2	<0.2	0.14 J	<0.2	<0.2	<5	<0.2	<0.2	<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	<0.000031	<0.00002	<0.1	<0.1	<0.1	0.18	<0.1	<0.1	<2.5	<0.1	<0.1	<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	<0.000031	<0.00002	<0.1	<0.1	<0.1	0.14	<0.1	<0.1	<2.5	<0.1	<0.1	<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	<0.00003	<0.00002	<0.05	<0.05	<0.05	0.034 J	<0.05	0.031 J	<1.3	<0.05	<0.05	<0.05	<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	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05
	P57-ROX-071519	7/15/2019	44.19 - 54.19	40.82	NE	<0.63	15	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	0.035	<0.025	0.023 J	<0.63	<0.025	0.066	0.038	<0.025	<0.025
	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	<0.00003	<0.00002	<0.025	<0.025	<0.025	0.036	<0.025	0.024 J	<0.63	<0.025	0.068	0.04	<0.025	<0.025
P-58	P58-ROX-101816	10/18/2016	40.21 - 65.21	41.05	NE	<50	340	<2	<50	<2	<2	<2	<2	<2	<2	<2	<0.000031	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2	<2	<2
	P58-ROX-011617	1/16/2017		40.73	NE	<25	260	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	0.98 J	<1	<1	<25	<1	<1	<1	<1	<1
	P58-ROX-041117	4/11/2017		40.74	NE	<13	320	<0.5	<13	<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	<0.5	<0.5
	P58-ROX-071317	7/13/2017		39.88	NE	<25	130	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P58-ROX-041118	4/11/2018		43.19	NE	<50	220	<2	<50	<2	<2	<2	<2	<2	<2	<2	<0.00003 UJ	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2	<2	<2
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<50	240	<2	<50	<2	<2	<2	<2	<2	<2	<2	0.00013 * J	<0.000021	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2	<2	<2
	P58-ROX-101618	10/16/2018		43.66	NE	<25	190	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P58-ROX-041719	4/17/2019		42.49	NE	<25	140	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P58-ROX-071519	7/15/2019	40.21 - 65.21	38.43	NE	<5	87	<0.2	<5	<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	<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	<0.000031	<0.000021	<0.2	<0.2	<0.2	0.13 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2
P-59	P59-ROX-101816	10/18/2016	47.91 - 72.91	43.39	NE	<1.3	8.7	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.000031	<0.000021	<0.05	<0.05	<0.05	2.1	<0.05	0.05	<1.3	<0.05	0.19	0.1	<0.05	<0.05
	P59-ROX-011617	1/16/2017		42.83	NE	<1.3	7.6	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.000031	<0.00002	<0.05	<0.05	<0.05	2.3	<0.05	0.07	<1.3	<0.05	0.25	0.14	<0.05	<0.05
	P59-ROX-040717	4/7/2017		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	<0.000031 UJ	<0.000021 UJ	<0.05	<0.05	<0.05	2	<0.05	0.048 J	<1.3	<0.05	0.18	0.089	<0.05	<0.05
	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	<0.000032	<0.000021	<0.05	<0.05	<0.05	1.9	<0.05	0.051	<1.3	<0.05	0.18	0.1	<0.05	<0.05
	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	<0.000029	<0.00002	<0.02	<0.02	<0.02	0.92	<0.02	0.046	<0.5	<0.02	0.19	0.085	<0.02	<0.02
	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	<0.00003	<0.00002	<0.02	<0.02	<0.02	0.81	<0.02	0.043	<0.5	<0.02	0.17	0.078	<0.02	<0.02
	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	<0.000031	<0.000021	<0.02	<0.02	<0.02	1.2	<0.02	0.052	<0.5	<0.02	0.22	0.092	<0.02	<0.02
	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	0.000032 p *	<0.000018	<0.02	<0.02	<0.02	0.77	<0.02	0.029	<0.5	<0.02	0.15	0.052	<0.02	<0.02
	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	<0.000031	<0.000021	<0.025	<0.025	<0.025	0.77	<0.025	0.038	<0.63	<0.025	0.14	0.068	<0.025	<0.025
	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	<0.000029	<0.00002	<0.01	<0.01	<0.01	1.1	<0.01	0.042	<0.25	<0.01	0.16	0.086	<0.01	<0.01
	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	<0.000029	<0.00002	<0.01	<0.01	<0.01	1.3	<0.01	0.061	<0.25	<0.01	0.12	0.1	<0.01	<0.01
P-66	P66-ROX-101416	10/14/2016	34.72 - 59.72	32.61	NE	<0.025	0.0069	<0.001	0.0049 J	0.004	0.0076	0.0038	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	0.0091	<0.001	0.071	<0.025	0.022	0.067	0.095	<0.001	<0.001
	P66-ROX-011117	1/11/2017		32.41	NE	<0.025	0.0058	<0.001	<0.025	0.0057	0.01	0.004	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0049	<0.001	0.083	<0.025	0.0052	0.051	0.12	<0.001	<0.001
	P66-ROX-041317	4/13/2017		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	<0.000031 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	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0061	<0.001	0.081	<0.025	0.0086	0.14	0.12	0.0018	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0045	<0.001	0.074	<0.025	0.0079	0.12	0.12	<0.001	<0.001
	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	<0.000028	<0.000019	<0.001	<0.001	<0.001	0.00082 J	<0.001	0.07	<0.025	0.0097	0.034	0.087	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.00056 J	<0.001	0.065	<0.025	0.0064	<0.001	0.071	<0.001	<0.001
	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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	0.025	<0.025	0.0055	<0.001	0.023	<0.001	<0.001
	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.026	<0.025	0.0053	<0.001	0.025	<0.001	<0.001
	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	<0.000031 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	<0.001 UJ	<0.001 UJ
	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	<0.000031 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	<0.001 UJ	<0.001 UJ
	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0008 J	<0.001	0.074	<0.025	0.0028	0.0021	0.082	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.015	<0.025	0.0087	0.0068	0.017	<0.001	<0.001
	P66-ROX-071019	7/10/2019	34.72 - 59.72	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0011	<0.001	0.048	<0.025	<0.001	0.12	0.078	<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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101416	10/14/2016	44.43 - 69.43	39.44	NE	<0.025	0.017	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.002	<0.001	0.00063 J	<0.025	<0.001	0.0038	0.0012	<0.001	<0.001
	P74-ROX-011217	1/12/2017		38.64	NE	<0.025	0.077	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	0.0016	<0.001	<0.001	<0.025	0.0055	<0.001	<0.001	<0.001	<0.001
	P74-ROX-040717	4/7/2017		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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0017	<0.001	<0.001	<0.025	<0.001	0.0012	<0.001	<0.001	<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	0.000038	<0.00002	<0.001	<0.001	<0.001	0.0051	<0.001	0.00053 J	<0.025	0.079	0.0021	0.00088 J	<0.001	<0.001
	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	<0.000029	<0.00002	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.13	0.64	<0.005	<0.005	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0013	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0019	<0.001	<0.001	<0.025	0.022	0.0014	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0015	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	P74-ROX-071219	7/12/2019	43.83 - 68.83	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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
P-93A	P93A-ROX-101816	10/18/2016	43.07 - 53.07	41.35	NE	<0.5	2.6	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000031	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02
	P93A-ROX-101816-DUP	10/18/2016		41.35	NE	<0.5	3.3	<0.02	<0.5	<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	<0.02	<0.02
	P93A-ROX-011217	1/12/2017		41.04	NE	<0.13	0.51 J	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005
	P93A-ROX-011217-DUP	1/12/2017		41.04	NE	<0.13	0.69 J	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005
	P93A-ROX-040717	4/7/2017		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	<0.00003	<0.00002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05	<0.002	<0.002	<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	<0.000031	<0.000021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05	<0.002	<0.002	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000033	<0.000022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.13	<0.005	<0.005	<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	<0.00003	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<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	<0.00003	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<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	<0.000032	<0.000021	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<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	<5	<0.2	<0.2	<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	<0.000031	<0.000021	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2	<0.2	<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	<0.000029	<0.00002	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2	<0.2	<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	<0.000029	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<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	<0.00003	<0.00002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1
	P93A-ROX-071519	7/15/2019	43.07 - 53.07	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	<0.00003 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	<0.02 UJ	<0.02 UJ
P-93B	P93B-ROX-101816	10/18/2016	74.60 - 76.60	42.73	NE	<13	86	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000031	<0.00002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5
	P93B-ROX-011017	1/10/2017		42.41	NE	<13	87	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000031	<0.00002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5
	P93B-ROX-011017-DUP	1/10/2017		42.41	NE	<13	88	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000031	<0.00002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5
	P93B-ROX-040617	4/6/2017		42.59	NE	<13	79	<0.5	<13	<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	<0.5	<0.5
	P93B-ROX-071117	7/11/2017		41.59	NE	<25	180	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<25	180	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000033	<0.000022	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P93B-ROX-101117	10/11/2017		42.21	NE	<25	250	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<25	210	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<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	<0.000028	<0.000019	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<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	<0.000028	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<25	130	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000028	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1	<1	<1
	P93B-ROX-071218	7/12/2018		45.36	NE	<25	110 J	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000031	<0.000021	<1	<1	<1	<1	<1	<1	<25	<1	<1	<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	<0.000033	<0.000022	<1	<1	<1	<1	<1	<1	<25	<1	<1	<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	<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	<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	<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	<2 UJ	<2 UJ
	P93B-ROX-011119	1/11/2019		45.15	NE	<130	1300	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.000029	<0.000019	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<130	1400	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<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	<0.000031	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5	<5	<5
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<130	860	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<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	<0.00003	<0.00002	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25
	P93B-ROX-071219-DUP	7/12/2019	74.78 - 76.78	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	<0.000031	<0.00002	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25

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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101816	10/18/2016	92.47 - 97.47	42.49	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0026	<0.001	<0.001	<0.001	<0.001
	P93C-ROX-011117	1/11/2017		42.20	NE	<0.025	0.00095 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0054	<0.001	<0.001	<0.001	<0.001
	P93C-ROX-040517	4/5/2017		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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0043	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0048	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0045	<0.001	<0.001	<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	<0.000031	<0.000002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0035	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001	<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	<0.00003	<0.00002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.25	0.0086 J	<0.01	<0.01	<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	<0.000029	<0.000002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0013	<0.001	<0.001	<0.001	<0.001
	P93C-ROX-071219	7/12/2019	92.88 - 97.88	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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0022	<0.001	<0.001	<0.001	<0.001
P-93D	P93D-ROX-101716	10/17/2016	125.75 - 127.75	42.78	NE	<0.025	0.023	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0026	<0.001	<0.001	<0.001	<0.001
	P93D-ROX-011017	1/10/2017		42.59	NE	<0.025	0.14	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.001	<0.001
	P93D-ROX-040617	4/6/2017		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	<0.000031	<0.000021	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0034	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0023	<0.001	<0.001	<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	<0.000027	<0.000018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	0.0038	<0.001	<0.001	<0.001	<0.025	0.0021	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0031	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	0.0007 J	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001	<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	<0.00003	<0.00002	0.0015	<0.001	0.0025	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001	<0.001	<0.001
	P93D-ROX-071219	7/12/2019	125.75 - 127.75	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001	<0.001	<0.001
P-114R	P114R-ROX-100716	10/7/2016	23.01 - 33.01	23.89	NE	<0.025	<0.001	<0.001	<0.025	<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	<0.001	<0.001
	P114R-ROX-010617	1/6/2017		24.81	NE	0.073	<0.001	<0.001	<0.025	<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	<0.001	<0.001
	P114R-ROX-041317	4/13/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00085 J	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00082 J	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00096 J	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0015	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0021	<0.001	<0.001	<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	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00082 J	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0009 J	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	P114R-ROX-070919	7/9/2019	23.01 - 33.01	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	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0045	<0.001	<0.001	<0.001	<0.001
ROST-3-MW	ROST3MW-ROX-101316	10/13/2016	37.81 - 47.81	38.19	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.036	<0.001	0.0021	<0.025	<0.001	0.0078	0.0031	<0.001	<0.001
	ROST3MW-ROX-011117	1/11/2017		37.50	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0058	<0.001	0.00089 J	<0.025	<0.001	0.0015	0.0014	<0.001	<0.001
	ROST3MW-ROX-041417	4/14/2017		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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.025	<0.001	0.0023	0.0079 J	<0.001	0.0059	0.0035	<0.001	<0.001
	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.025	<0.001	<0.001	<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	<0.025	<0.001	<0.001	<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	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	0.00093 J	<0.001	<0.001	<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	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0031	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	ROST3MW-ROX-071119	7/11/2019	37.81 - 47.81	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.015	<0.001	0.0021	<0.025	<0.001	0.0045	0.0044	<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	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	1,1,2,2-Tetrachloroethane	Tetrachloroethene
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 [1]	0.07 [1]		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]	0.00043 [3]	0.005 [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-101316	10/13/2016	34.95 - 44.95	38.45	NE	<0.05	0.025	<0.002	<0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000031	<0.00002	<0.002	<0.002	<0.002	0.089	<0.002	0.0049	<0.05	<0.002	0.087	0.0074	<0.002	<0.002
	ROST4PZC-ROX-011217	1/12/2017		37.88	NE	<0.025	0.021	<0.001	<0.025	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.061	<0.001	0.0064	<0.025	<0.001	0.081	0.0098	<0.001	<0.001
	ROST4PZC-ROX-041717	4/17/2017		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	<0.00003	<0.00002	<0.002	<0.002	<0.002	0.088	<0.002	0.0073	<0.05	<0.002	0.12	0.012	<0.002	<0.002
	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	<0.00003	<0.00002	0.00084 J	<0.001	<0.001	0.13	<0.001	0.0064	<0.025	<0.001	0.098	0.0097	<0.001	<0.001
	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	0.00028	<0.00002	<0.001	<0.001	<0.001	0.086	<0.001	0.0044	<0.025	<0.001	0.092	0.0061	<0.001	<0.001
	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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.00062 J	<0.001	0.0017	<0.025	<0.001	0.014	0.0035	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	0.0008 J	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0011	<0.001	<0.001	<0.025	<0.001	<0.001	0.00084 J	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.061	<0.001	0.0016	<0.025	<0.001	0.031	0.0021	<0.001	<0.001
	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	<0.000028	<0.000019	<0.001	<0.001	<0.001	0.034	<0.001	0.0029	<0.025	<0.001	0.044	0.0042	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.033	<0.001	0.0033	<0.025	<0.001	0.037	0.0049	<0.001	<0.001
	ROST4PZC-ROX-071219	7/12/2019	34.95 - 44.95	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	0.0008 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	<0.001	<0.001
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	0.000098	<0.000002	<0.005	<0.005	<0.005	0.27	<0.005	0.0084	<0.13	<0.005	0.091	0.017	<0.005	<0.005
	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	<0.00029	<0.00019	<0.002	<0.002	<0.002	0.043	<0.002	0.0096	<0.05	<0.002	0.098	0.009	<0.002	<0.002
	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	0.000041 p	<0.00002	<0.001	<0.001	<0.001	0.0025	<0.001	0.0018	<0.025	<0.001	0.023	0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0069	<0.001	0.0023	<0.025	<0.001	0.015	0.0022	<0.001	<0.001
	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	0.00071 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	<0.001 UJ	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.00051 J	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0028	<0.001	<0.001	<0.025	<0.001	0.0027	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001	<0.025	<0.001	0.0026	<0.001	<0.001	<0.001
	ROST4PZE-ROX-071219	7/12/2019	34.75 - 44.75	37.18	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	<0.000033	<0.000022	<0.001	<0.001	<0.001	0.13	<0.001	0.0076	<0.025	<0.001	0.094	0.0091	<0.001	<0.001
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	<0.000031	<0.00002	<0.001	<0.001	<0.001	0.0024	<0.001	0.0014	0.0064 J	<0.001	<0.001	0.0013	<0.001	<0.001
	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	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<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	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
	ROST4PZG-ROX-071219	7/12/2019	34.28 - 44.28	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	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001
T-12	T12-ROX-101716	10/17/2016	46.83 - 72.83	41.19	NE	<0.25	1.7	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	0.0065 J	<0.01	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.12	<0.01	0.014	<0.25	0.023	0.09	0.022	<0.01	<0.01
	T12-ROX-011217	1/12/2017		40.70	NE	<0.25	1.5	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000031	<0.000021	<0.01	<0.01	<0.01	0.051	<0.01	0.012	<0.25	0.041	0.054	0.02	<0.01	<0.01
	T12-ROX-040617	4/6/2017		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	<0.00003 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	<0.01	<0.01
	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.053	<0.01	0.0064 J	<0.25	0.024	0.061	0.0091 J	<0.01	<0.01
	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.025	<0.01	0.012	<0.25	0.023	0.05	0.023	<0.01	<0.01
	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.054	<0.01	0.012	<0.25	0.029	0.084	0.012	<0.01	<0.01
	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	<0.000028	<0.000019	<0.01	<0.01	<0.01	0.095	<0.01	0.018	<0.25	0.016	0.087	0.022	<0.01	<0.01
	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	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.12	<0.01	0.03	<0.25	0.012	0.082	0.055	<0.01	<0.01
	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	<0.000029	<0.000019	<0.01	<0.01	<0.01	0.1	<0.01	0.034	<0.25	0.0086 J	0.11	0.056	<0.01	<0.01
	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.039	<0.01	0.0099 J	<0.25	<0.01	0.07	0.016	<0.01	<0.01
	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	<0.000029	<0.00002	<0.01	<0.01	<0.01	0.048	<0.01	0.014	<0.25	<0.01	0.061	0.017	<0.01	0.013
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																									<0.005 UJ
	T12-ROX-071519	7/15/2019	46.83 - 72.83	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	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.028	<0.01	0.0095 J	<0.25	<0.01	0.033	0.018	<0.01	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs												
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101316	10/13/2016	48.80 - 58.80	38.79	NE	<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 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW1-ROX-011217	1/12/2017		38.35	NE	<0.001	<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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW1-ROX-041717	4/17/2017		38.58	NE	<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	<0.0002
	MW1-ROX-071117	7/11/2017		37.24	NE	<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	<0.0002
	MW1-ROX-100617	10/6/2017		37.63	NE	<0.001	<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	<0.00019
	MW1-ROX-010518	1/5/2018		40.06	NE	<0.001	<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	<0.00019
	MW1-ROX-040618	4/6/2018		40.82	NE	<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	<0.0002 UJ
	MW1-ROX-070618	7/6/2018		41.40	NE	<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	<0.00022
	MW1-ROX-101018	10/10/2018		41.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.00095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095
	MW1-ROX-010819	1/8/2019		40.96	NE	<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	<0.0002 UJ
	MW1-ROX-041119	4/11/2019		40.50	NE	<0.001	<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	<0.00019 UJ
	MW1-ROX-071119	7/11/2019	48.80 - 58.80	38.16	NE	<0.001	<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	<0.00019
MW-02	MW2-ROX-101316	10/13/2016	49.87 - 59.87	40.10	NE	0.01	<0.001	0.017	0.044	<0.001	0.056	0.0057	0.061	<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	<0.00019
	MW2-ROX-011217	1/12/2017		39.58	NE	0.013	<0.001	0.031	0.073	<0.001	0.051	0.0062	0.057	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW2-ROX-041717	4/17/2017		39.69	NE	0.012	<0.005	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	<0.00021
	MW2-ROX-071217	7/12/2017		38.66	NE	0.008	<0.001	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	<0.00039
	MW2-ROX-101217	10/12/2017		39.03	NE	0.012	<0.005	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	<0.00095 UJ
	MW2-ROX-011118	1/11/2018		41.24	NE	0.0082	<0.001	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	<0.00019
	MW2-ROX-040918	4/9/2018		42.10	NE	0.006	<0.001	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	<0.0002
	MW2-ROX-071018	7/10/2018		42.59	NE	0.008	<0.001	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	<0.00022
	MW2-ROX-101218	10/12/2018		42.71	NE	0.0049	<0.001	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	<0.0002
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	0.0054	<0.001	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	<0.00019
	MW2-ROX-010819	1/8/2019		42.43	NE	0.0089	<0.002	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	<0.0002 UJ
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	0.0085	<0.002	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	<0.0002 UJ
	MW2-ROX-041619	4/16/2019		41.80	NE	0.0068	<0.005	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	<0.0002
	MW2-ROX-070919	7/9/2019	49.87 - 59.87	37.86	NE	0.0092	<0.005	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	<0.00019
MW-03	MW3-ROX-100716	10/7/2016	34.67 - 44.67	25.79	NE	0.0025	<0.001	<0.001	<0.001	<0.001	0.0089	0.001 J	0.01	<0.0002	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW3-ROX-010617	1/6/2017		25.65	NE	0.039	<0.001	<0.001	0.00072 J	<0.001	0.12	0.0081	0.12	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW3-ROX-041117	4/11/2017		26.13	NE	0.019	<0.001	<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	<0.00019
	MW3-ROX-071217	7/12/2017		24.25	NE	0.0045	<0.001	<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	<0.0004
	MW3-ROX-100517	10/5/2017		25.02	NE	0.0011	<0.001	<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	<0.00021
	MW3-ROX-010818	1/8/2018		27.28	NE	0.0061	<0.001	<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	<0.00019
	MW3-ROX-040518	4/5/2018		27.98	NE	0.00095 J	<0.001	<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	<0.0002
	MW3-ROX-070618	7/6/2018		28.30	NE	0.0019	<0.001	<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	<0.00021
	MW3-ROX-100518	10/5/2018		28.18	NE	<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	0.000062 J
	MW3-ROX-010919	1/9/2019		28.05	NE	0.0027	<0.001	<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	<0.0002
	MW3-ROX-040919	4/9/2019		27.50	NE	0.00056 J	<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	<0.00019
	MW3-ROX-071019	7/10/2019	34.67 - 44.67	22.66	NE	0.014	<0.001	<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	<0.0002
MW-04	MW4-ROX-100616	10/6/2016	45.06 - 55.06	37.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	0.0019 J	<0.0002	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW4-ROX-010917	1/9/2017		36.84	NE	<0.001	<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	0.013	<0.0097	<0.0097	<0.00019	<0.00019
	MW4-ROX-041017	4/10/2017		37.08	NE	<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	0.000051 J
	MW4-ROX-071017	7/10/2017		35.68	NE	<0.001	<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	<0.00019
	MW4-ROX-100517	10/5/2017		36.32	NE	<0.001	<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	<0.00019
	MW4-ROX-010918	1/9/2018		38.65	NE	<0.001	<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	<0.00019
	MW4-ROX-040918	4/9/2018		39.32	NE	<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	<0.0002
	MW4-ROX-071018	7/10/2018		39.60	NE	<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	<0.0002
	MW4-ROX-100818	10/8/2018		39.61	NE	<0.001	<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	<0.00019
	MW4-ROX-010719	1/7/2019		39.22	NE	<0.001	<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	<0.00019
	MW4-ROX-040819	4/8/2019		38.97	NE	<0.001	<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	<0.00019
	MW4-ROX-070819	7/8/2019	45.06 - 55.06	34.47	NE	<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	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101016	10/10/2016	33.97 - 43.97	25.47	NE	<0.001	<0.001	<0.001	<0.001	<0.001	0.0017 J	0.00077 J	0.0025 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029 UJ	0.00073 J	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002
	MW5-ROX-010617	1/6/2017		25.33	NE	0.00076 J	<0.001	<0.001	<0.001	<0.001	0.0069	0.0016 J	0.0085 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW5-ROX-041217	4/12/2017		25.69	NE	<0.001	<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	<0.00019
	MW5-ROX-071217	7/12/2017		23.96	NE	<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	<0.0004
	MW5-ROX-101217	10/12/2017		25.04	NE	<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	<0.00096
	MW5-ROX-011118	1/11/2018		26.98	NE	<0.001	<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	<0.00019
	MW5-ROX-040918	4/9/2018		27.78	NE	<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	<0.0002
	MW5-ROX-071018	7/10/2018		27.87	NE	<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	<0.00022
	MW5-ROX-101218	10/12/2018		27.95	NE	<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	<0.00022
	MW5-ROX-010819	1/8/2019		27.65	NE	<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 UJ	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002 UJ
	MW5-ROX-041519	4/15/2019		26.96	NE	<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	<0.0002
	MW5-ROX-071219	7/12/2019	33.97 - 43.97	22.37	NE	0.0066	<0.001	<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	<0.00019 H UJ
MW-06A	MW6A-ROX-101116	10/11/2016	34.83 - 44.83	27.51	NE	<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	<0.0002
	MW6A-ROX-011017	1/10/2017		27.43	NE	<0.001	<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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW6A-ROX-041217	4/12/2017		27.69	NE	<0.001	<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	<0.00019
	MW6A-ROX-071117	7/11/2017		26.16	NE	<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	<0.0002
	MW6A-ROX-100417	10/4/2017		27.09	NE	<0.001	<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	<0.00019
	MW6A-ROX-010518	1/5/2018		29.22	NE	<0.001	<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	<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	<0.005	<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	<0.0002
	MW6A-ROX-070518	7/5/2018		30.10	NE	<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	<0.001
	MW6A-ROX-100418	10/4/2018		30.10	NE	<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	<0.0002
	MW6A-ROX-010819	1/8/2019		29.77	NE	<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 UJ	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002 UJ
	MW6A-ROX-040519	4/5/2019		29.34	NE	<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	<0.0002
	MW6A-ROX-071119	7/11/2019	33.85 - 43.85	24.57	NE	<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	<0.00021
MW-06B	MW6B-ROX-101116	10/11/2016	64.05 - 69.05	27.56	NE	<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	<0.0028 U	<0.01	<0.01	<0.0002	<0.0002
	MW6B-ROX-011017	1/10/2017		27.49	NE	<0.001	<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	<0.0093	0.0025 J	<0.0093	<0.0093	<0.00019	<0.00019
	MW6B-ROX-041217	4/12/2017		27.75	NE	<0.001	<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	<0.00019
	MW6B-ROX-071117	7/11/2017		26.18	NE	<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	<0.0002
	MW6B-ROX-100417	10/4/2017		27.16	NE	<0.001	<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	<0.00019
	MW6B-ROX-010518	1/5/2018		29.25	NE	<0.001	<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	<0.00019
	MW6B-ROX-040518	4/5/2018		29.95	NE	<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	<0.0002
	MW6B-ROX-070518	7/5/2018		30.15	NE	<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	<0.00022
	MW6B-ROX-100418	10/4/2018		30.13	NE	<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	<0.0002
	MW6B-ROX-010819	1/8/2019		29.83	NE	<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	<0.0002 UJ
	MW6B-ROX-040519	4/5/2019		29.40	NE	0.00047 J	<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	<0.0002
	MW6B-ROX-071119	7/11/2019	64.05 - 69.05	24.62	NE	<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	<0.00021
MW-06C	MW6C-ROX-101016	10/10/2016	84.95 - 89.95	27.37	NE	<0.001	<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	0.0026 J	<0.0095	<0.0095	<0.00019	<0.00019
	MW6C-ROX-011017	1/10/2017		27.26	NE	<0.001	<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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW6C-ROX-041217	4/12/2017		27.56	NE	<0.001	<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	<0.00019
	MW6C-ROX-071117	7/11/2017		25.99	NE	<0.001	<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	<0.00019
	MW6C-ROX-100417	10/4/2017		26.98	NE	<0.001	<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	<0.00019
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.001	<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	<0.00019
	MW6C-ROX-040518	4/5/2018		29.74	NE	<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	<0.0002
	MW6C-ROX-070518	7/5/2018		29.93	NE	<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	<0.00021
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<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	<0.0002
	MW6C-ROX-100418	10/4/2018		29.93	NE	<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	<0.0002
	MW6C-ROX-010819	1/8/2019		29.62	NE	<0.001	<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 UJ	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019 UJ
	MW6C-ROX-040519	4/5/2019		29.20	NE	<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	<0.0002
	MW6C-ROX-071119	7/11/2019	84.95 - 89.95	24.42	NE	<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	<0.0002

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs												
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101016	10/10/2016	104.72 - 109.72	27.26	NE	<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 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW6D-ROX-101016-DUP	10/10/2016		27.26	NE	<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 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW6D-ROX-011017	1/10/2017		27.14	NE	<0.001	<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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW6D-ROX-011017-DUP	1/10/2017		27.14	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	0.000062 J	0.000057 J	0.00007 J	0.000075 J	0.000072 J	<0.028	<0.0093	<0.0093	<0.0093	<0.0093	0.000068 J	0.000086 J
	MW6D-ROX-041217	4/12/2017		27.43	NE	<0.001	<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	<0.00019
	MW6D-ROX-041217-DUP	4/12/2017		27.43	NE	<0.001	<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	<0.00019
	MW6D-ROX-071117	7/11/2017		25.83	NE	<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	<0.0002
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<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	<0.0002
	MW6D-ROX-100517	10/5/2017		26.83	NE	<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	<0.00021
	MW6D-ROX-010818	1/8/2018		28.90	NE	<0.001	<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	<0.00019
	MW6D-ROX-040518	4/5/2018		29.52	NE	<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	<0.0002
	MW6D-ROX-070518	7/5/2018		29.76	NE	<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	<0.0002
	MW6D-ROX-100418	10/4/2018		29.76	NE	<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	<0.0002
	MW6D-ROX-010819	1/8/2019		29.45	NE	<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	<0.0002 UJ
	MW6D-ROX-040519	4/5/2019		29.02	NE	<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	<0.0002
	MW6D-ROX-071119	7/11/2019	104.72 - 109.72	24.24	NE	<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	<0.0002	0.000043 J	<0.0002	<0.03	<0.01	<0.01	<0.01 UJ	<0.01	<0.0002	<0.0002
MW-07	MW7-ROX-100616	10/6/2016	42.92 - 52.92	39.24	NE	<10	<10	<10	<10	<10	<50	<50	<100	0.00017 J	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW7-ROX-100616-DUP	10/6/2016		39.24	NE	<10	<10	<10	<10	<10	<50	<50	<100	0.00016 J	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.0023 J	<0.01	<0.01	<0.0002	<0.0002
	MW7-ROX-010917	1/9/2017		38.90	NE	<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	<0.0002
	MW7-ROX-041017	4/10/2017		38.92	NE	0.8 J	<1	<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	<0.00019
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	0.85 J	<1	<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	<0.00019
	MW7 ROX-071117	7/11/2017		37.79	NE	<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	<0.00019
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<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	<0.00019
	MW7-ROX-100517	10/5/2017		38.45	NE	<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	<0.00019
	MW7-ROX-010918	1/9/2018		40.67	NE	<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 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019
	MW7-ROX-040918	4/9/2018		41.38	NE	0.8 J	<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 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	0.96 J	<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	<0.0002
	MW7-ROX-071018	7/10/2018		41.64	NE	<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	<0.00022
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<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	<0.0002
	MW7-ROX-100818	10/8/2018		41.69	NE	<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	<0.0002
	MW7-ROX-010719	1/7/2019		41.25	NE	<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	<0.00019 UJ
	MW7-ROX-040819	4/8/2019		40.94	NE	<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	<0.00095 UJ
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<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	<0.00095 UJ
	MW7-ROX-070819	7/8/2019	42.92 - 52.92	36.58	NE	1.5	<1	<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	<0.00019
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	1.5	<1	<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	<0.00019
MW-08	MW8-ROX-100616	10/6/2016	33.60 - 43.60	29.99	NE	<5	<5	<5	<5	<5	<25	<25	<50	<0.0002	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW8-ROX-010917	1/9/2017		29.79	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<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	<0.0002
	MW8-ROX-041017	4/10/2017		30.02	NE	<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	<0.0002
	MW8-ROX-071017	7/10/2017		28.48	NE	<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	<0.00019
	MW8-ROX-100517	10/5/2017		29.28	NE	<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	<0.00019
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<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	<0.00019
	MW8-ROX-010918	1/9/2018		31.60	NE	<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 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019
	MW8-ROX-040918	4/9/2018		32.27	NE	<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	<0.0002
	MW8-ROX-071018	7/10/2018		32.42	NE	<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	<0.00021
	MW8-ROX-100818	10/8/2018		32.45	NE	<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	0.000075 J
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<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	<0.0002
	MW8-ROX-010719	1/7/2019		32.04	NE	<2	<2	<2	<2	<2	<10	<10	<20	0.00017 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019 UJ
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<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	<0.00019 UJ
	MW8-ROX-040819	4/8/2019		31.70	NE	<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	<0.00019
	MW8-ROX-070819	7/8/2019	33.60 - 43.60	27.15	NE	0.48 J	<0.5	<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	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs												
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						1.0 [1]	0.005 [1]		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]	0.0003 [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-101316	10/13/2016	46.45 - 56.45	40.39	NE	<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 UJ	<0.01	0.0052 J	<0.01	<0.01	<0.0002	<0.0002
	MW9-ROX-011117	1/11/2017		40.06	NE	<0.001	<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	<0.0093	<0.005 U	<0.0093	<0.0093	<0.00019	<0.00019
	MW9-ROX-041417	4/14/2017		40.67	NE	<0.001	<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	<0.00019
	MW9-ROX-071217	7/12/2017		38.86	NE	<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	<0.00038
	MW9-ROX-100917	10/9/2017		39.17	NE	<0.001	<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	<0.00019
	MW9-ROX-011018	1/10/2018		41.10	NE	<0.001	<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	<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	<0.005	<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	<0.0002 UJ
	MW9-ROX-070918	7/9/2018		42.82	NE	<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	<0.0002
	MW9-ROX-101018	10/10/2018		42.88	NE	<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	<0.000095
	MW9-ROX-011419	1/14/2019		42.97	NE	<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	<0.0002
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<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	<0.0002
	MW9-ROX-041119	4/11/2019		42.54	NE	<0.001	<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	<0.00019 UJ
	MW9-ROX-071019	7/10/2019	46.04 - 56.04	38.74	NE	<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	<0.0002
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<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	<0.0002
MW-10	MW10-ROX-101216	10/12/2016	44.43 - 54.43	40.27	NE	<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 UJ	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021
	MW10-ROX-011117	1/11/2017		39.88	NE	<0.001	<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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW10-ROX-041417	4/14/2017		40.50	NE	<0.001	<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	<0.00019
	MW10-ROX-071117	7/11/2017		38.86	NE	<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	<0.0002
	MW10-ROX-100917	10/9/2017		38.94	NE	<0.001	<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	<0.00019
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<0.001	<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	<0.00019
	MW10-ROX-011018	1/10/2018		40.88	NE	<0.001	<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	<0.00019
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<0.001	<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	<0.00019
	MW10-ROX-040518	4/5/2018		41.94	NE	<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	<0.0002
	MW10-ROX-070918	7/9/2018		42.88	NE	<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	<0.0002
	MW10-ROX-101018	10/10/2018		42.87	NE	<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	<0.000095
	MW10-ROX-011119	1/11/2019		43.06	NE	<0.001	<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	<0.00019
	MW10-ROX-042219	4/22/2019		42.54	NE	<0.001	<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	<0.00019
	MW10-ROX-071219	7/12/2019	44.43 - 54.43	39.33	NE	<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	<0.0002 H UJ
MW-11	MW11-ROX-101216	10/12/2016	41.66 - 51.66	37.93	NE	<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 UJ	<0.0098	0.0042 J	<0.0098	<0.0098	<0.0002	<0.0002
	MW11-ROX-011117	1/11/2017		37.63	NE	<0.001	<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	<0.0093	0.0045 J	<0.0093	<0.0093	<0.00019	<0.00019
	MW11-ROX-041417	4/14/2017		38.17	NE	<0.001	<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	<0.00019
	MW11-ROX-071017	7/10/2017		36.39	NE	<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	<0.0002
	MW11-ROX-100917	10/9/2017		36.32	NE	<0.001	<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	<0.00019
	MW11-ROX-011018	1/10/2018		39.00	NE	<0.001	<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	<0.00019
	MW11-ROX-040618	4/6/2018		39.98	NE	<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	<0.0002 UJ
	MW11-ROX-070918	7/9/2018		40.54	NE	<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	<0.00021
	MW11-ROX-101118	10/11/2018		40.65	NE	<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	<0.0002
	MW11-ROX-011019	1/10/2019		40.45	NE	<0.001	<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	0.000038 J	<0.028	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019
	MW11-ROX-041119	4/11/2019		40.03	NE	<0.001	<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	<0.00019 UJ
	MW11-ROX-070919	7/9/2019	41.66 - 51.66	35.95	NE	<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	0.000053 J
MW-12	MW12-ROX-101116	10/11/2016	41.92 - 51.92	38.85	NE	<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	0.000061 J	<0.0002	<0.0002	0.0087 J	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW12-ROX-010917	1/9/2017		38.11	NE	<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	0.0028 J	<0.01	<0.01	<0.0002	<0.0002
	MW12-ROX-041417	4/14/2017		38.50	NE	<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	<0.0002
	MW-12-ROX-07072017	7/7/2017		36.84	NE	<0.001	<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	<0.00019
	MW12-ROX-100617	10/6/2017		37.23	NE	<0.001	<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	<0.00019
	MW12-ROX-011118	1/11/2018		39.62	NE	<0.001	<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	<0.00019
	MW12-ROX-040518	4/5/2018		40.50	NE	<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	<0.0002
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<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	<0.0002
	MW12-ROX-070618	7/6/2018		41.03	NE	<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	<0.00021
	MW12-ROX-101018	10/10/2018		40.84	NE	<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	<0.000095
	MW12-ROX-010919	1/9/2019		40.78	NE	<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	0.00045
	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	<0.0002 H UJ
	MW12-ROX-040919	4/9/2019		40.42	NE	<0.001	<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	<0.00019
	MW12-ROX-071019	7/10/2019	41.92 - 51.92	35.87	NE	<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	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs												
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-100716	10/7/2016	25.57 - 35.57	25.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW13-ROX-010617	1/6/2017		25.54	NE	<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 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW13-ROX-041317	4/13/2017		25.75	NE	<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	<0.001
	MW13-ROX-070717	7/7/2017		23.64	NE	<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	<0.00095
	MW13-ROX-101017	10/10/2017		25.20	NE	<0.001	<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	<0.00019
	MW13-ROX-010918	1/9/2018		27.20	NE	<0.001	<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	<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	<0.005	<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	<0.0002 UJ
	MW13-ROX-070918	7/9/2018		27.60	NE	<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	<0.0002
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.001	<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	<0.00019
	MW13-ROX-010719	1/7/2019		27.18	NE	<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	<0.00019 UJ
	MW13-ROX-041519	4/15/2019		26.44	NE	<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	<0.00098
	MW13-ROX-070919	7/9/2019	24.80 - 34.80	21.59	NE	<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	<0.00019
MW-14	MW14-ROX-101416	10/14/2016	33.42 - 43.42	29.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000054 J *	<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	<0.00019
	MW14-ROX-011117	1/11/2017		29.61	NE	<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	0.0039 J	<0.0098	<0.0098	<0.0002	<0.0002
	MW14-ROX-041317	4/13/2017		29.54	NE	<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	<0.0002
	MW14-ROX-070717	7/7/2017		28.28	NE	<0.001	<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	0.000042 J
	MW14-ROX-101017	10/10/2017		29.44	NE	<0.001	<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	<0.00019
	MW14-ROX-010918	1/9/2018		31.34	NE	<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 UJ	<0.00071	<0.00071	<0.00071	<0.00071	<0.000014	<0.000014
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<0.001	<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	<0.00019
	MW14-ROX-041018	4/10/2018		31.96	NE	<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	<0.0002
	MW14-ROX-071118	7/11/2018		32.06	NE	<0.001	<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	<0.00019
	MW14-ROX-101518	10/15/2018		32.32	NE	<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	<0.0002
	MW14-ROX-010919	1/9/2019		32.04	NE	<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	<0.0002
	MW14-ROX-041619	4/16/2019		31.06	NE	<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	<0.0002
	MW14-ROX-071019	7/10/2019	33.42 - 43.42	26.95	NE	<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	<0.0002
MW-16	MW16-ROX-101116	10/11/2016	37.06 - 47.06	39.64	NE	<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	<0.0002
	MW16-ROX-010917	1/9/2017		39.15	NE	<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	<0.0002
	MW16-ROX-041417	4/14/2017		39.45	NE	<0.001	<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	<0.00019
	MW16-ROX-071017	7/10/2017		38.16	NE	<0.001	<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	<0.00019
	MW16-ROX-100617	10/6/2017		38.04	NE	<0.001	<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	<0.00019
	MW16-ROX-010818	1/8/2018		40.71	NE	<0.001	<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	<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	<0.005	<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	<0.0002
	MW16-ROX-070618	7/6/2018		42.35	NE	<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	<0.00022
	MW16-ROX-100518	10/5/2018		42.24	NE	<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	<0.0002
	MW16-ROX-011119	1/11/2019		42.10	NE	<0.001	<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	<0.00019
	MW16-ROX-041219	4/12/2019		41.74	NE	<0.001	<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	<0.00019
	MW16-ROX-070919	7/9/2019	37.50 - 47.50	37.55	NE	<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	<0.00019
MW-22	MW22-ROX-101716	10/17/2016	37.88 - 47.88	38.17	NE	0.12	<0.01	0.36	0.097	<0.01	1.7	0.76	2.5	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.00098	<0.00098
	MW22-ROX-101716-DUP	10/17/2016		38.17	NE	0.12	<0.01	0.35	0.092	<0.01	1.7	0.8	2.5	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.00098	<0.00098
	MW22-ROX-011217	1/12/2017		37.80	NE	0.032	<0.005	0.19	0.048	<0.005	0.52	0.29	0.8	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	0.028 *	<0.0093	0.0024 J	<0.0093	<0.0093	<0.00093	<0.00093
	MW22-ROX-011217-DUP	1/12/2017		37.80	NE	0.028	<0.005	0.17	0.046	<0.005	0.48	0.26	0.74	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.031 *	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001
	MW22-ROX-041717	4/17/2017		38.24	NE	0.077	<0.01	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	<0.00019
	MW22-ROX-041717-DUP	4/17/2017		38.24	NE	0.084	<0.01	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	<0.00019
	MW22-ROX-071217	7/12/2017		36.83	NE	0.017	<0.002	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	<0.00041
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	0.015	<0.002	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	<0.0004
	MW22-ROX-101317	10/13/2017		36.94	NE	0.0042	<0.001	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	<0.00019
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	0.0037	<0.001	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	<0.00019
	MW22-ROX-011118	1/11/2018		39.25	NE	0.19	<0.025	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	<0.00019
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	0.21	<0.025	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	<0.00019
	MW22-ROX-041018	4/10/2018	38.43 - 48.43	NM	NE	0.28	<0.02	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	<0.0002 UJ
	MW22-ROX-071018	7/10/2018		40.88	NE	0.41	<0.025	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	<0.00022
	MW22-ROX-101518	10/15/2018		41.11	NE	0.13	<0.01	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	<0.00021
	MW22-ROX-010919	1/9/2019		40.91	NE	0.071	<0.025	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	<0.0002
	MW22-ROX-041719	4/17/2019		40.31	NE	0.15	<0.025	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	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-100716	10/7/2016	29.02 - 39.02	26.64	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002
	MW23-ROX-011017	1/10/2017		26.83	NE	<0.001	<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	0.0089 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019
	MW23-ROX-041117	4/11/2017		27.54	NE	<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	<0.0002
	MW23-ROX-071017	7/10/2017		25.13	NE	<0.001	<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	<0.00019
	MW23-ROX-100517	10/5/2017		26.42	NE	<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	<0.00019 UJ
	MW23-ROX-010518	1/5/2018		28.52	NE	<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	<0.00019
	MW23-ROX-040918	4/9/2018		29.24	NE	<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	<0.0002
	MW23-ROX-070918	7/9/2018		29.10	NE	<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	<0.0011
	MW23-ROX-100918	10/9/2018		29.00	NE	<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	<0.000096
	MW23-ROX-010919	1/9/2019		28.96	NE	<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	<0.0002
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.001	<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	<0.00019
	MW23-ROX-071019	7/10/2019	29.02 - 39.02	23.01	NE	<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	<0.00021
MW-24	MW24-ROX-101116	10/11/2016	38.89 - 48.89	39.19	NE	<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	<0.0002
	MW24-ROX-010917	1/9/2017		38.97	NE	<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	<0.0002
	MW24-ROX-041717	4/17/2017		39.42	NE	<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	<0.0002
	MW24-ROX-070717	7/7/2017		37.68	NE	<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	<0.0002
	MW24-ROX-100617	10/6/2017		37.93	NE	<0.001	<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	<0.00019
	MW24-ROX-010818	1/8/2018		40.36	NE	<0.001	<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	<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	<0.005	<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	<0.0002 UJ
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<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	<0.0002 UJ
	MW24-ROX-070618	7/6/2018		41.87	NE	<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	<0.00022
	MW24-ROX-100518	10/5/2018		41.81	NE	<0.001	<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	<0.00019
	MW24-ROX-011019	1/10/2019		41.76	NE	<0.001	<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	<0.00019
	MW24-ROX-041219	4/12/2019		41.33	NE	<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	<0.0002
	MW24-ROX-070919	7/9/2019	39.61 - 49.61	37.04	NE	<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	<0.00021
MW-25	MW25-ROX-100616	10/6/2016	35.59 - 45.59	34.27	NE	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.02	<0.0002	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW25-ROX-011117	1/11/2017		34.00	NE	<0.001	<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	0.0034 J	<0.0097	<0.0097	<0.00019	<0.00019
	MW25-ROX-041117	4/11/2017		34.31	NE	<0.001	<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	<0.00019
	MW25-ROX-071017	7/10/2017		32.75	NE	<0.001	<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 UJ	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.00019	<0.00019
	MW25-ROX-100517	10/5/2017		33.52	NE	<0.001	<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	<0.00019
	MW25-ROX-010918	1/9/2018		35.80	NE	<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 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	MW25-ROX-040918	4/9/2018		36.49	NE	<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	<0.0002
	MW25-ROX-071018	7/10/2018		36.71	NE	<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	<0.00021
	MW25-ROX-100818	10/8/2018		36.73	NE	<0.001	<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	<0.00019
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.001	<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	<0.00019
	MW25-ROX-040819	4/8/2019		36.03	NE	<0.001	<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	<0.00019
	MW25-ROX-070819	7/8/2019	35.59 - 45.59	31.52	NE	<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	<0.00021
MW-26	MW26-ROX-101016	10/10/2016	38.15 - 48.15	37.13	NE	<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	0.0031 J	<0.01	<0.01	<0.0002	<0.0002
	MW26-ROX-010617	1/6/2017		36.74	NE	<0.001	<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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW26-ROX-041417	4/14/2017		36.91	NE	<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	<0.0002
	MW26-ROX-070717	7/7/2017		35.61	NE	<0.001	<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	<0.00019
	MW26-ROX-100517	10/5/2017		36.10	NE	<0.001	<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 UJ	<0.0095	<0.0095	<0.00019	<0.00019
	MW26-ROX-010818	1/8/2018		38.41	NE	<0.001	<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	<0.00019
	MW26-ROX-040518	4/5/2018		39.22	NE	<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	<0.0002
	MW26-ROX-070618	7/6/2018		39.73	NE	<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	<0.00022
	MW26-ROX-100918	10/9/2018		39.53	NE	<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	<0.000096
	MW26-ROX-010919	1/9/2019		39.46	NE	<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	<0.0002
	MW26-ROX-041019	4/10/2019		38.90	NE	<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	<0.0002
	MW26-ROX-071019	7/10/2019	38.15 - 48.15	34.54	NE	<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	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101216	10/12/2016	39.79 - 49.79	38.50	NE	<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 UJ	<0.0098	0.0077 J	<0.0098	<0.0098	<0.0002	<0.0002
	MW27-ROX-011117	1/11/2017		38.05	NE	<0.001	0.00094 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	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW27-ROX-041417	4/14/2017		38.72	NE	<0.001	<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	<0.00019
	MW27-ROX-071017	7/10/2017		37.23	NE	<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	<0.0002
	MW27-ROX-100917	10/9/2017		37.17	NE	<0.001	<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	<0.00019
	MW27-ROX-011018	1/10/2018		38.98	NE	<0.001	<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	<0.00019
	MW27-ROX-040618	4/6/2018		40.34	NE	<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	<0.0002 UJ
	MW27-ROX-070918	7/9/2018		41.16	NE	<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	<0.00022
	MW27-ROX-100918	10/9/2018		41.06	NE	<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	<0.000096
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.001	<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	<0.00019
	MW27-ROX-041519	4/15/2019		40.99	NE	<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	<0.0002
	MW27-ROX-070919	7/9/2019		37.65	NE	<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	<0.00021
MW-28	MW28-ROX-101316	10/13/2016	33.61 - 43.61	37.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0011 J	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029 UJ	<0.0098	0.0032 J	<0.0098	<0.0098	<0.0002	<0.0002
	MW28-ROX-011217	1/12/2017		37.14	NE	0.00082 J	<0.001	0.0013	0.00071 J	<0.001	0.01	0.02	0.03	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.014 J *	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	MW28-ROX-041717	4/17/2017		38.05	NE	<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	<0.0002
	MW28-ROX-071217	7/12/2017		36.48	NE	<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	<0.0004
	MW28-ROX-100917	10/9/2017		36.44	NE	<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	<0.00019
	MW28-ROX-011018	1/10/2018		38.18	NE	<0.001	<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	<0.00019
	MW28-ROX-040618	4/6/2018		39.25	NE	<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	<0.0002 UJ
	MW28-ROX-070918	7/9/2018		40.08	NE	<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	<0.00021
	MW28-ROX-101118	10/11/2018		40.25	NE	<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	<0.0002
	MW28-ROX-010819	1/8/2019		40.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002 UJ
	MW28-ROX-040919	4/9/2019		40.42	NE	<0.001	<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	<0.00019
	MW28-ROX-071019	7/10/2019	33.61 - 43.61	37.14	NE	<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	<0.0002
P-54	P54-ROX-101216	10/12/2016	38.00 - 63.00	37.85	NE	<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 UJ	<0.0098	0.006 J	<0.0098	<0.0098	<0.0002	<0.0002
	P54-ROX-010917	1/9/2017		37.80	NE	<0.001	0.00077 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	<0.0002
	P54-ROX-041717	4/17/2017		38.30	NE	<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	<0.0002
	P54-ROX-071017	7/10/2017		36.35	NE	<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	<0.0002
	P54-ROX-100617	10/6/2017		36.79	NE	<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	<0.00021
	P54-ROX-011118	1/11/2018		39.10	NE	<0.001	<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	<0.00019
	P54-ROX-040618	4/6/2018		40.05	NE	<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	<0.0002 UJ
	P54-ROX-070618	7/6/2018		40.51	NE	<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	<0.00022
	P54-ROX-100518	10/5/2018		40.46	NE	<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	<0.0002
	P54-ROX-011019	1/10/2019		40.37	NE	<0.001	<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	<0.00019
	P54-ROX-041119	4/11/2019		39.91	NE	<0.001	<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	<0.00019 UJ
	P54-ROX-070919	7/9/2019		35.60	NE	<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	<0.0002
P-56	P56-ROX-101716	10/17/2016	40.82 - 65.82	42.35	NE	0.011	<0.001	0.062	0.015	<0.001	0.18	0.0047 J J	0.19	0.00043	<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	<0.0002
	P56-ROX-011217	1/12/2017		42.01	NE	0.0049	<0.001	0.04	0.01	<0.001	0.073	0.003 J	0.076	0.00061	0.0001 J	0.00007 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019
	P56-ROX-040617	4/6/2017		42.46	NE	0.0041	<0.001	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	<0.0002
	P56-ROX-071217	7/12/2017		41.11	NE	0.0018	<0.001	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	<0.00041
	P56-ROX-101117	10/11/2017		41.08	NE	0.0071	<0.001	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	<0.0002
	P56-ROX-011018	1/10/2018		43.63	NE	0.0076	<0.005	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	<0.00019
	P56-ROX-041118	4/11/2018		44.40	NE	<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	<0.0002
	P56-ROX-071118	7/11/2018		45.25	NE	0.0022	<0.001	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	<0.00022
	P56-ROX-101518	10/15/2018		45.37	NE	0.00076 J	<0.001	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	<0.0002
	P56-ROX-011019	1/10/2019		45.16	NE	0.00086 J	<0.001	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	<0.00019
	P56-ROX-041719	4/17/2019		44.38	NE	0.0026	<0.001	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	<0.0002
	P56-ROX-071219	7/12/2019		40.50	NE	0.0079	<0.001	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	<0.00099 H UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101816	10/18/2016	44.19 - 54.19	43.17	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	0.00058	0.00013 J	0.000032 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	P57-ROX-011617	1/16/2017		42.82	NE	<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	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002
	P57-ROX-040717	4/7/2017		43.05	NE	<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 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.001	<0.001
	P57-ROX-071317	7/13/2017		41.95	NE	<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	<0.0002
	P57-ROX-101617	10/16/2017		42.64	NE	<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	<0.00019
	P57-ROX-011818	1/18/2018		44.86	NE	<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	<0.00019
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	<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	<0.00019
	P57-ROX-041018	4/10/2018		45.45	NE	<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	<0.0002
	P57-ROX-071118	7/11/2018		45.76	NE	<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	<0.00021
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<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	<0.00022
	P57-ROX-101618	10/16/2018		45.86	NE	<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	<0.00019
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<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	<0.00019
	P57-ROX-011419	1/14/2019		45.63	NE	<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	<0.0002
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<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	<0.0002
	P57-ROX-041719	4/17/2019		44.89	NE	<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	<0.00098
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<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	<0.00099
	P57-ROX-071519	7/15/2019	44.19 - 54.19	40.82	NE	0.013 J	<0.025	<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	<0.00097
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	0.015 J	<0.025	<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	<0.0002
P-58	P58-ROX-101816	10/18/2016	40.21 - 65.21	41.05	NE	<2	<2	<2	<2	<2	<10	<10	<20	0.00051 J	0.00021 J	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.029 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.00098	<0.00098
	P58-ROX-011617	1/16/2017		40.73	NE	<1	<1	<1	<1	<1	<5	<5	<10	<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	<0.00095
	P58-ROX-041117	4/11/2017		40.74	NE	<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	<0.00095
	P58-ROX-071317	7/13/2017		39.88	NE	<1	<1	<1	<1	<1	<5	<5	<10	0.00058 H J	<0.00039 UJ	<0.00039 UJ	<0.00039 UJ	0.000083 J H J	<0.00039 UJ	<0.00039 UJ	<0.00039 UJ	<0.03 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.00039 UJ	<0.00039 UJ
	P58-ROX-041118	4/11/2018		43.19	NE	<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	<0.0002
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<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	<0.00097
	P58-ROX-101618	10/16/2018		43.66	NE	<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	<0.00019
	P58-ROX-041719	4/17/2019		42.49	NE	<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	<0.00099
	P58-ROX-071519	7/15/2019	40.21 - 65.21	38.43	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	<0.001	<0.001	<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	<0.0002
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<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	<0.00097
P-59	P59-ROX-101816	10/18/2016	47.91 - 72.91	43.39	NE	2.3	<0.05	0.64	<0.05	<0.05	4.2	0.27	4.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	0.0025 J	<0.0098	<0.0098	<0.0002	<0.0002
	P59-ROX-011617	1/16/2017		42.83	NE	0.61	<0.05	0.87	0.22	<0.05	3.5	0.14 J	3.6	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.00099	<0.00099
	P59-ROX-040717	4/7/2017		43.31	NE	0.59	<0.05	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 UJ	<0.0097 UJ	0.0063 J H J	<0.0097 UJ	<0.0097 UJ	<0.00095	<0.00095
	P59-ROX-071317	7/13/2017		42.16	NE	2.1	<0.05	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	<0.0002
	P59-ROX-101317	10/13/2017		41.87	NE	0.4	<0.02	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	<0.00019
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	0.39	<0.02	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	<0.00039 UJ
	P59-ROX-011118	1/11/2018		44.44	NE	0.28	<0.02	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	<0.0004 U
	P59-ROX-041218	4/12/2018		45.13	NE	0.46	<0.02	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	<0.0002
	P59-ROX-071118	7/11/2018		46.16	NE	0.52	<0.025	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	<0.00022
	P59-ROX-101618	10/16/2018		45.99	NE	1.2	<0.01	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	<0.00019
	P59-ROX-011419	1/14/2019		46.10	NE	0.33	<0.01	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	<0.0002
P-66	P66-ROX-101416	10/14/2016	34.72 - 59.72	32.61	NE	<0.001	<0.001	0.024	0.0014	<0.001	0.0039 J	0.001 J	0.0049 J	0.001 *	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	0.019 J H J	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00095	<0.00095
	P66-ROX-011117	1/11/2017		32.41	NE	0.00087 J	<0.001	0.024	0.0012	<0.001	0.0031 J	0.0013 J	0.0044 J	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	0.0026 J	<0.0097	<0.0097	<0.00097	<0.00097
	P66-ROX-041317	4/13/2017		32.19	NE	0.0011	<0.001	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	<0.0002
	P66-ROX-071217	7/12/2017		31.38	NE	0.00092 J	<0.001	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	<0.0004
	P66-ROX-101017	10/10/2017		32.27	NE	<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	<0.00019
	P66-ROX-011118	1/11/2018		34.09	NE	0.00075 J	<0.001	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	<0.00019
	P66-ROX-041018	4/10/2018		34.93	NE	<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	<0.0002
	P66-ROX-071118	7/11/2018		35.10	NE	<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	<0.00097
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	<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	<0.00099
	P66-ROX-101518	10/15/2018		35.31	NE	0.00098 J	<0.001 UJ	<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	<0.00019
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	0.00099 J	<0.001 UJ	<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	<0.0002
	P66-ROX-010919	1/9/2019		34.99	NE	0.0011	<0.001	<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	<0.0002
	P66-ROX-041619	4/16/2019		34.08	NE	<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	<0.00099 UJ
	P66-ROX-071019	7/10/2019		30.00	NE	0.00061 J	<0.001	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	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101416	10/14/2016	44.43 - 69.43	39.44	NE	0.0015	<0.001	0.013	0.005	<0.001	0.0035 J	0.00079 J	0.0043 J	0.000064 J *	<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	<0.00019
	P74-ROX-011217	1/12/2017		38.64	NE	0.0017	<0.001	0.0048	0.0011	<0.001	0.0037 J	0.0015 J	0.0052 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.011 J *	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	P74-ROX-040717	4/7/2017		38.92	NE	<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 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.00022	<0.00022
	P74-ROX-071217	7/12/2017		38.08	NE	0.0018	<0.001	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	<0.0002
	P74-ROX-101617	10/16/2017		38.57	NE	0.0033	<0.001	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	<0.00019
	P74-ROX-011018	1/10/2018		40.25	NE	0.0081	<0.005	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	<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	<0.005	<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	<0.0002
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<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	<0.0002
	P74-ROX-071118	7/11/2018		42.22	NE	<0.001	<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	<0.00019
	P74-ROX-101618	10/16/2018		42.18	NE	0.0023	<0.001	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	<0.00019
	P74-ROX-011019	1/10/2019		42.14	NE	0.00072 J	<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	<0.00019
	P74-ROX-041719	4/17/2019		41.57	NE	<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	<0.0002
	P74-ROX-071219	7/12/2019	43.83 - 68.83	37.95	NE	0.0011	<0.001	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	<0.0002 H UJ
P-93A	P93A-ROX-101816	10/18/2016	43.07 - 53.07	41.35	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<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	<0.0002
	P93A-ROX-101816-DUP	10/18/2016		41.35	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<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	<0.0002
	P93A-ROX-011217	1/12/2017		41.04	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	0.0028 J	<0.0098	<0.0098	<0.0002	<0.0002
	P93A-ROX-011217-DUP	1/12/2017		41.04	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05	<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	<0.00021
	P93A-ROX-040717	4/7/2017		41.26	NE	<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 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	0.00013 J	0.00019
	P93A-ROX-040717-DUP	4/7/2017		41.26	NE	<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 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.00021	<0.00021
	P93A-ROX-071317	7/13/2017		40.11	NE	<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	<0.00037
	P93A-ROX-101117	10/11/2017		40.87	NE	<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	<0.00019 UJ
	P93A-ROX-011118	1/11/2018		42.71	NE	<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	<0.00019
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<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	<0.00019
	P93A-ROX-041118	4/11/2018		NM	NE	<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	<0.0002
	P93A-ROX-052218	5/22/2018		NM	NE	<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	<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	<0.0002
	P93A-ROX-101618	10/16/2018		44.05	NE	<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	<0.00019
	P93A-ROX-011419	1/14/2019		43.78	NE	<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	<0.0002
	P93A-ROX-041819	4/18/2019		42.98	NE	<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	<0.0002
	P93A-ROX-071519	7/15/2019	43.07 - 53.07	38.92	NE	<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	<0.00019
P-93B	P93B-ROX-101816	10/18/2016	74.60 - 76.60	42.73	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.0024 J	<0.01	<0.01	<0.0002	<0.0002
	P93B-ROX-011017	1/10/2017		42.41	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<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	<0.0002
	P93B-ROX-011017-DUP	1/10/2017		42.41	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<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	<0.0002
	P93B-ROX-040617	4/6/2017		42.59	NE	<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	<0.00019
	P93B-ROX-071117	7/11/2017		41.59	NE	<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	<0.00019
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<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	<0.00019
	P93B-ROX-101117	10/11/2017		42.21	NE	<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	<0.00019
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<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	<0.00019
	P93B-ROX-011518	1/15/2018		44.42	NE	<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	<0.00019
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<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	<0.0002
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<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	<0.0002
	P93B-ROX-071218	7/12/2018		45.36	NE	<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	<0.00019
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<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	<0.00097
	P93B-ROX-101518	10/15/2018		45.64	NE	<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	<0.00019
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<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	<0.00019
	P93B-ROX-011119	1/11/2019		45.15	NE	<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	0.0036 J	<0.0096	<0.00019	<0.00019
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<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	<0.00019
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<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	<0.0002
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<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	<0.0002
	P93B-ROX-071219	7/12/2019	74.78 - 76.78	40.35	NE	0.32	<0.25	<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	<0.0002 H UJ
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	0.36	<0.25	<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	<0.0002 H UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						**1.0** [1]	**0.005** [1]		**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]	**0.0003** [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-101816	10/18/2016	92.47 - 97.47	42.49	NE	<0.001	<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	<0.00019
	P93C-ROX-011117	1/11/2017		42.20	NE	<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	0.0089 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002
	P93C-ROX-040517	4/5/2017		42.19	NE	<0.001	<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	0.000048 J
	P93C-ROX-071217	7/12/2017		41.30	NE	<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	<0.00039
	P93C-ROX-101117	10/11/2017		42.04	NE	<0.001	<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	<0.00019
	P93C-ROX-011118	1/11/2018		43.95	NE	<0.001	<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	<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	<0.005	<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	<0.0002
	P93C-ROX-071218	7/12/2018		45.22	NE	<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	<0.00021
	P93C-ROX-101518	10/15/2018		45.31	NE	<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	<0.0002
	P93C-ROX-011019	1/10/2019		45.01	NE	<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	<0.00019
	P93C-ROX-041819	4/18/2019		44.15	NE	<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	<0.0002
	P93C-ROX-071219	7/12/2019	92.88 - 97.88	40.18	NE	<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	<0.0002 H UJ
P-93D	P93D-ROX-101716	10/17/2016	125.75 - 127.75	42.78	NE	<0.001	<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	<0.00019
	P93D-ROX-011017	1/10/2017		42.59	NE	<0.001	<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	<0.00019
	P93D-ROX-040617	4/6/2017		42.80	NE	<0.001	<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	<0.00019
	P93D-ROX-071117	7/11/2017		41.64	NE	<0.001	<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	<0.00019
	P93D-ROX-101117	10/11/2017		42.42	NE	<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	<0.00019 UJ
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00019 UJ	<0.00019 UJ
	P93D-ROX-041218	4/12/2018		45.95	NE	<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	<0.0002
	P93D-ROX-071218	7/12/2018		45.57	NE	<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	<0.0011
	P93D-ROX-101518	10/15/2018		45.70	NE	<0.001	<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	0.000097 J
	P93D-ROX-011119	1/11/2019		45.31	NE	<0.001	<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	<0.00019
	P93D-ROX-041819	4/18/2019		44.50	NE	<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	<0.0002
	P93D-ROX-071219	7/12/2019	125.75 - 127.75	40.53	NE	0.00048 J	<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	<0.0002
P-114R	P114R-ROX-100716	10/7/2016	23.01 - 33.01	23.89	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0098 J	<0.0095	0.0025 J	<0.0095	<0.0095	<0.00019	<0.00019
	P114R-ROX-010617	1/6/2017		24.81	NE	<0.001	0.00098 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 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002
	P114R-ROX-041317	4/13/2017		25.05	NE	<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	<0.0002
	P114R-ROX-071117	7/11/2017		22.45	NE	<0.001	<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	<0.00019
	P114R-ROX-101017	10/10/2017		24.45	NE	<0.001	<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	<0.00019
	P114R-ROX-010918	1/9/2018		26.37	NE	<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 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	<0.00095
	P114R-ROX-040618	4/6/2018		26.76	NE	<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	<0.0002 UJ
	P114R-ROX-070918	7/9/2018		26.38	NE	<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	<0.00019
	P114R-ROX-101118	10/11/2018		26.27	NE	<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	<0.0002
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<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	<0.0002
	P114R-ROX-010719	1/7/2019		25.88	NE	<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	<0.00019 UJ
	P114R-ROX-041519	4/15/2019		24.70	NE	<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	<0.001
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<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	<0.00099
	P114R-ROX-070919	7/9/2019	23.01 - 33.01	19.48	NE	0.00099 J	<0.001	<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	<0.00096 UJ
ROST-3-MW	ROST3MW-ROX-101316	10/13/2016	37.81 - 47.81	38.19	NE	0.0016	<0.001	0.022	0.0032	<0.001	0.044	0.0083	0.053	0.00013 J	0.000023 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	<0.0002
	ROST3MW-ROX-011117	1/11/2017		37.50	NE	<0.001	<0.001	0.0026	<0.001	<0.001	0.0016 J	<0.005	0.0021 J	0.00034	0.00008 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019
	ROST3MW-ROX-041417	4/14/2017		38.16	NE	<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	<0.00019
	ROST3MW-ROX-071117	7/11/2017		36.61	NE	0.0012	<0.001	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	<0.0002
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<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	<0.00019
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE	<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	<0.00019
	ROST3MW-ROX-022618	2/26/2018		40.00	NE	<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	<0.005	<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	<0.0002 UJ
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<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	<0.00021
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<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	<0.000095
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<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	<0.00019
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<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	<0.0002
	ROST3MW-ROX-071119	7/11/2019	37.81 - 47.81	36.38	NE	0.0021	<0.001	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	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs								SVOCs													
						Toluene	Trichloroethene	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)	Dibenzo(a,h)anthracene
Screening Values (mg/L)						1.0 [1]	0.005 [1]		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]	0.0003 [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-101316	10/13/2016	34.95 - 44.95	38.45	NE	0.023	<0.002	0.039	0.01	<0.002	0.26	0.0048 J	0.27	0.00099	0.0001 J	0.000048 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019
	ROST4PZC-ROX-011217	1/12/2017		37.88	NE	0.017	0.00055 J	0.048	0.011	<0.001	0.13	0.0059	0.14	0.0014	0.00019	0.00021	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.00019
	ROST4PZC-ROX-041717	4/17/2017		38.24	NE	0.028	<0.002	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	<0.00019
	ROST4PZC-ROX-071217	7/12/2017		37.20	NE	0.017	<0.001	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	<0.0002
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	0.013	<0.001	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	<0.00096 UJ
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<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	<0.00019
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<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	<0.0002
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<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	<0.00022
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	0.011	<0.001	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	<0.0002
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	0.0045	<0.001	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	<0.0002
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	0.0087	<0.001	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	<0.0002
	ROST4PZC-ROX-071219	7/12/2019	34.95 - 44.95	37.64	NE	0.014	<0.001	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	<0.00097 H UJ
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	0.041	<0.005	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	<0.0002
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	0.022	<0.002	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	<0.00019
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	0.0027	<0.001	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	<0.0002
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	0.0027	<0.001	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	<0.00022
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<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	<0.0002
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	<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	<0.00038 UJ
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	0.0011	<0.001	0.0033	<0.001	<0.001	0.006	0.0014 J	0.0074 J	<0.0002	<0.0002	<0.0002	<0.00098	<0.0002	<0.0002	<0.0002	<0.0002	0.0071 J	<0.0098	0.024 * J	<0.0098	<0.0098	<0.00098	<0.0002
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	0.00097 J	<0.001	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	<0.00019
	ROST4PZE-ROX-071219	7/12/2019	34.75 - 44.75	37.18	NE	0.029	<0.001	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	<0.00098 H UJ
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	0.0018 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	<0.00019
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<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	<0.00019
	ROST4PZG-ROX-040918	4/9/2018		40.07	NE	<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	<0.0002
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<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	<0.00021
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<0.001	<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	<0.00019
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<0.001	<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	<0.00019
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<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	<0.00019 UJ
	ROST4PZG-ROX-071219	7/12/2019	34.28 - 44.28	36.60	NE	0.0014	<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	<0.0072 UJ	<0.0096	<0.0096	<0.00019	<0.00019
T-12	T12-ROX-101716	10/17/2016	46.83 - 72.83	41.19	NE	0.15	<0.01	0.063	0.0073 J	<0.01	0.37	0.0082 J	0.38	0.00038	0.000067 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002
	T12-ROX-011217	1/12/2017		40.70	NE	0.065	<0.01	0.046	0.009 J	<0.01	0.22	0.008 J	0.23	0.00046	<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	<0.0002
	T12-ROX-040617	4/6/2017		41.18	NE	0.032	<0.01	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	<0.00019
	T12-ROX-071317	7/13/2017		40.10	NE	0.08	<0.01	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	<0.00019
	T12-ROX-101317	10/13/2017		39.48	NE	0.055	<0.01	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	<0.0002
	T12-ROX-011018	1/10/2018		42.14	NE	0.085	<0.01	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	<0.00019
	T12-ROX-041218	4/12/2018		43.03	NE	0.085	<0.01	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	<0.0002
	T12-ROX-071118	7/11/2018		44.12	NE	0.097	<0.01	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	<0.00022
	T12-ROX-101618	10/16/2018		43.90	NE	0.085	<0.01	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	<0.00019
	T12-ROX-011019	1/10/2019		44.00	NE	0.051	<0.01	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	<0.00019
	T12-ROX-041719	4/17/2019		43.38	NE	0.071	<0.01	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	<0.0002
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																						
	T12-ROX-071519	7/15/2019	46.83 - 72.83	39.74	NE	0.1	<0.01	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	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101316	10/13/2016	48.80 - 58.80	38.79	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000033 J	0.000041 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW1-ROX-011217	1/12/2017		38.35	NE	<0.0093	<0.0093	<0.0093	<0.0093	0.00048 J B	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW1-ROX-041717	4/17/2017		38.58	NE	<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
	MW1-ROX-071117	7/11/2017		37.24	NE	<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
	MW1-ROX-100617	10/6/2017		37.63	NE	<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
	MW1-ROX-010518	1/5/2018		40.06	NE	<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
	MW1-ROX-040618	4/6/2018		40.82	NE	<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
	MW1-ROX-070618	7/6/2018		41.40	NE	<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
	MW1-ROX-101018	10/10/2018		41.17	NE	<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
	MW1-ROX-010819	1/8/2019		40.96	NE	<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
	MW1-ROX-041119	4/11/2019		40.50	NE	<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
	MW1-ROX-071119	7/11/2019	48.80 - 58.80	38.16	NE	<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
MW-02	MW2-ROX-101316	10/13/2016	49.87 - 59.87	40.10	NE	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0088	0.0095	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW2-ROX-011217	1/12/2017		39.58	NE	<0.0093	<0.0093	<0.0093	<0.0093	0.00091 J B	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	0.013	0.0074	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW2-ROX-041717	4/17/2017		39.69	NE	<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
	MW2-ROX-071217	7/12/2017		38.66	NE	<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
	MW2-ROX-101217	10/12/2017		39.03	NE	<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
	MW2-ROX-011118	1/11/2018		41.24	NE	<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
	MW2-ROX-040918	4/9/2018		42.10	NE	<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
	MW2-ROX-071018	7/10/2018		42.59	NE	<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
	MW2-ROX-101218	10/12/2018		42.71	NE	<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
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	<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
	MW2-ROX-010819	1/8/2019		42.43	NE	<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
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	<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
	MW2-ROX-041619	4/16/2019		41.80	NE	<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
	MW2-ROX-070919	7/9/2019	49.87 - 59.87	37.86	NE	<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
MW-03	MW3-ROX-100716	10/7/2016	34.67 - 44.67	25.79	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00041	0.00022	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW3-ROX-010617	1/6/2017		25.65	NE	<0.0093	<0.0093 UJ	<0.0093	<0.0093	0.00058 J	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	0.0016	0.00081	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW3-ROX-041117	4/11/2017		26.13	NE	<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
	MW3-ROX-071217	7/12/2017		24.25	NE	<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
	MW3-ROX-100517	10/5/2017		25.02	NE	<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
	MW3-ROX-010818	1/8/2018		27.28	NE	<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
	MW3-ROX-040518	4/5/2018		27.98	NE	<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
	MW3-ROX-070618	7/6/2018		28.30	NE	<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
	MW3-ROX-100518	10/5/2018		28.18	NE	<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
	MW3-ROX-010919	1/9/2019		28.05	NE	<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
	MW3-ROX-040919	4/9/2019		27.50	NE	<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
	MW3-ROX-071019	7/10/2019	34.67 - 44.67	22.66	NE	<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
MW-04	MW4-ROX-100616	10/6/2016	45.06 - 55.06	37.18	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00016 J	0.000069 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW4-ROX-010917	1/9/2017		36.84	NE	<0.0097	<0.0097	<0.0097	<0.0097	<0.00064 U	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000066 J	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW4-ROX-041017	4/10/2017		37.08	NE	<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
	MW4-ROX-071017	7/10/2017		35.68	NE	<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
	MW4-ROX-100517	10/5/2017		36.32	NE	<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
	MW4-ROX-010918	1/9/2018		38.65	NE	<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
	MW4-ROX-040918	4/9/2018		39.32	NE	<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
	MW4-ROX-071018	7/10/2018		39.60	NE	<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
	MW4-ROX-100818	10/8/2018		39.61	NE	<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
	MW4-ROX-010719	1/7/2019		39.22	NE	<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
	MW4-ROX-040819	4/8/2019		38.97	NE	<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
	MW4-ROX-070819	7/8/2019	45.06 - 55.06	34.47	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101016	10/10/2016	33.97 - 43.97	25.47	NE	<0.0098	<0.0098 UJ	<0.0098 UJ	<0.0098	<0.0098	0.0015 J	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.00012 J	0.000041 J	<0.0098 UJ	<0.02 UJ	<0.0098 UJ	<0.0098 UJ	<0.02 UJ	<0.0002	<0.0098 UJ	<0.0002
	MW5-ROX-010617	1/6/2017		25.33	NE	<0.0093	<0.0093 UJ	<0.0093	<0.0093	0.00067 J	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	0.00063	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW5-ROX-041217	4/12/2017		25.69	NE	<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
	MW5-ROX-071217	7/12/2017		23.96	NE	<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
	MW5-ROX-101217	10/12/2017		25.04	NE	<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
	MW5-ROX-011118	1/11/2018		26.98	NE	<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
	MW5-ROX-040918	4/9/2018		27.78	NE	<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
	MW5-ROX-071018	7/10/2018		27.87	NE	<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
	MW5-ROX-101218	10/12/2018		27.95	NE	<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
	MW5-ROX-010819	1/8/2019		27.65	NE	<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
	MW5-ROX-041519	4/15/2019		26.96	NE	<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
	MW5-ROX-071219	7/12/2019	33.97 - 43.97	22.37	NE	<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
MW-06A	MW6A-ROX-101116	10/11/2016	34.83 - 44.83	27.51	NE	<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 UJ	<0.02 UJ	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6A-ROX-011017	1/10/2017		27.43	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.00066 U	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW6A-ROX-041217	4/12/2017		27.69	NE	<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
	MW6A-ROX-071117	7/11/2017		26.16	NE	<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
	MW6A-ROX-100417	10/4/2017		27.09	NE	<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
	MW6A-ROX-010518	1/5/2018		29.22	NE	<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
	MW6A-ROX-040518	4/5/2018	33.85 - 43.85	29.83	NE	<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
	MW6A-ROX-070518	7/5/2018		30.10	NE	<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
	MW6A-ROX-100418	10/4/2018		30.10	NE	<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
	MW6A-ROX-010819	1/8/2019		29.77	NE	<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
	MW6A-ROX-040519	4/5/2019		29.34	NE	<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
	MW6A-ROX-071119	7/11/2019	33.85 - 43.85	24.57	NE	<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
MW-06B	MW6B-ROX-101116	10/11/2016	64.05 - 69.05	27.56	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000038 J	0.00006 J	<0.01 UJ	<0.02 UJ	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6B-ROX-011017	1/10/2017		27.49	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.00051 U	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW6B-ROX-041217	4/12/2017		27.75	NE	<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
	MW6B-ROX-071117	7/11/2017		26.18	NE	<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
	MW6B-ROX-100417	10/4/2017		27.16	NE	<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
	MW6B-ROX-010518	1/5/2018		29.25	NE	<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
	MW6B-ROX-040518	4/5/2018		29.95	NE	<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
	MW6B-ROX-070518	7/5/2018		30.15	NE	<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
	MW6B-ROX-100418	10/4/2018		30.13	NE	<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
	MW6B-ROX-010819	1/8/2019		29.83	NE	<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
	MW6B-ROX-040519	4/5/2019		29.40	NE	<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
	MW6B-ROX-071119	7/11/2019	64.05 - 69.05	24.62	NE	<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
MW-06C	MW6C-ROX-101016	10/10/2016	84.95 - 89.95	27.37	NE	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000049 J	0.000077 J	<0.0095	<0.019 UJ	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6C-ROX-011017	1/10/2017		27.26	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.00049 U	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW6C-ROX-041217	4/12/2017		27.56	NE	<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
	MW6C-ROX-071117	7/11/2017		25.99	NE	<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
	MW6C-ROX-100417	10/4/2017		26.98	NE	<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
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.000059 U	<0.0095	0.000036 J	0.000048 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6C-ROX-040518	4/5/2018		29.74	NE	<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
	MW6C-ROX-070518	7/5/2018		29.93	NE	<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
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<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
	MW6C-ROX-100418	10/4/2018		29.93	NE	<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
	MW6C-ROX-010819	1/8/2019		29.62	NE	<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
	MW6C-ROX-040519	4/5/2019		29.20	NE	<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
	MW6C-ROX-071119	7/11/2019	84.95 - 89.95	24.42	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101016	10/10/2016	104.72 - 109.72	27.26	NE	<0.01	<0.0098 UJ	<0.0098 UJ	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000032 J	0.000058 J	<0.0098 UJ	<0.02 UJ	<0.0098 UJ	<0.0098 UJ	<0.02 UJ	<0.0002	<0.0098 UJ	<0.0002
	MW6D-ROX-101016-DUP	10/10/2016		27.26	NE	<0.01	<0.0098 UJ	<0.0098 UJ	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000038 J	0.000064 J	<0.0098 UJ	<0.02 UJ	<0.0098 UJ	<0.0098 UJ	<0.02 UJ	<0.0002	<0.0098 UJ	<0.0002
	MW6D-ROX-011017	1/10/2017		27.14	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW6D-ROX-011017-DUP	1/10/2017		27.14	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.00075 U	<0.0093	<0.00019	<0.00019	<0.0093	0.00009 J	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW6D-ROX-041217	4/12/2017		27.43	NE	<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
	MW6D-ROX-041217-DUP	4/12/2017		27.43	NE	<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
	MW6D-ROX-071117	7/11/2017		25.83	NE	<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
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<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
	MW6D-ROX-100517	10/5/2017		26.83	NE	<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
	MW6D-ROX-010818	1/8/2018		28.90	NE	<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
	MW6D-ROX-040518	4/5/2018		29.52	NE	<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
	MW6D-ROX-070518	7/5/2018		29.76	NE	<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
	MW6D-ROX-100418	10/4/2018		29.76	NE	<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
	MW6D-ROX-010819	1/8/2019		29.45	NE	<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
	MW6D-ROX-040519	4/5/2019		29.02	NE	<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
	MW6D-ROX-071119	7/11/2019	104.72 - 109.72	24.24	NE	<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
MW-07	MW7-ROX-100616	10/6/2016	42.92 - 52.92	39.24	NE	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0031	0.0043	0.004 J	0.0049 J	<0.01	<0.01	<0.02	<0.0002	0.46	<0.0002
	MW7-ROX-100616-DUP	10/6/2016		39.24	NE	<0.01	<0.01	0.0038 J	<0.01	0.00046 J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0029	0.0039	0.0044 J	<0.02	<0.01	<0.01	<0.02	<0.0002	0.43	<0.0002
	MW7-ROX-010917	1/9/2017		38.90	NE	<0.01	<0.01	<0.01	<0.01	<0.00049 U	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.002	0.003	0.0039 J	0.0044 J	<0.01	<0.01	<0.02	0.00014 J	0.17	<0.0002
	MW7-ROX-041017	4/10/2017		38.92	NE	<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
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<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
	MW7 ROX-071117	7/11/2017		37.79	NE	<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
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<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
	MW7-ROX-100517	10/5/2017		38.45	NE	<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
	MW7-ROX-010918	1/9/2018		40.67	NE	<0.0095	<0.0095	<0.0095	<0.0095	<0.00048 U	<0.0095	<0.00019	0.00013 J	0.0019 J	<0.00019	<0.0095	0.0027	0.0038	0.0031 J	<0.019	<0.0095	<0.0095 UJ	<0.019 UJ	0.00021	0.077	<0.00019
	MW7-ROX-040918	4/9/2018		41.38	NE	<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
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<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
	MW7-ROX-071018	7/10/2018		41.64	NE	<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
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<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
	MW7-ROX-100818	10/8/2018		41.69	NE	<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
	MW7-ROX-010719	1/7/2019		41.25	NE	<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
	MW7-ROX-040819	4/8/2019		40.94	NE	<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
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<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
	MW7-ROX-070819	7/8/2019	42.92 - 52.92	36.58	NE	<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
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<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
MW-08	MW8-ROX-100616	10/6/2016	33.60 - 43.60	29.99	NE	<0.01	<0.01	0.0035 J	<0.01	<0.01 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0098	0.0028	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	0.29	<0.0002
	MW8-ROX-010917	1/9/2017		29.79	NE	<0.0098	<0.0098	<0.0098	0.0083 J	<0.00061 U	<0.0098	<0.0002	<0.0002	0.0039 J	<0.0002	<0.0098	0.015	0.0038	<0.0098	<0.02	<0.0098	<0.0098	0.0018 J	<0.0002	0.22	<0.0002
	MW8-ROX-041017	4/10/2017		30.02	NE	<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
	MW8-ROX-071017	7/10/2017		28.48	NE	<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
	MW8-ROX-100517	10/5/2017		29.28	NE	<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
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<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
	MW8-ROX-010918	1/9/2018		31.60	NE	<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 UJ	0.002 J H J	0.000085 J	0.043	<0.00019
	MW8-ROX-040918	4/9/2018		32.27	NE	<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
	MW8-ROX-071018	7/10/2018		32.42	NE	<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
	MW8-ROX-100818	10/8/2018		32.45	NE	<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
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<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
	MW8-ROX-010719	1/7/2019		32.04	NE	<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
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<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
	MW8-ROX-040819	4/8/2019		31.70	NE	<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
	MW8-ROX-070819	7/8/2019	33.60 - 43.60	27.15	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						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]
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-101316	10/13/2016	46.45 - 56.45	40.39	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	0.000026 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW9-ROX-011117	1/11/2017		40.06	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW9-ROX-041417	4/14/2017		40.67	NE	<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
	MW9-ROX-071217	7/12/2017		38.86	NE	<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
	MW9-ROX-100917	10/9/2017		39.17	NE	<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
	MW9-ROX-011018	1/10/2018		41.10	NE	<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
	MW9-ROX-040618	4/6/2018	46.04 - 56.04	42.29	NE	<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
	MW9-ROX-070918	7/9/2018		42.82	NE	<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
	MW9-ROX-101018	10/10/2018		42.88	NE	<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
	MW9-ROX-011419	1/14/2019		42.97	NE	<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
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<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
	MW9-ROX-041119	4/11/2019		42.54	NE	<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
	MW9-ROX-071019	7/10/2019	46.04 - 56.04	38.74	NE	<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
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<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
MW-10	MW10-ROX-101216	10/12/2016	44.43 - 54.43	40.27	NE	<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
	MW10-ROX-011117	1/11/2017		39.88	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW10-ROX-041417	4/14/2017		40.50	NE	<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
	MW10-ROX-071117	7/11/2017		38.86	NE	<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
	MW10-ROX-100917	10/9/2017		38.94	NE	<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
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<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
	MW10-ROX-011018	1/10/2018		40.88	NE	<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
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<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
	MW10-ROX-040518	4/5/2018		41.94	NE	<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
	MW10-ROX-070918	7/9/2018		42.88	NE	<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
	MW10-ROX-101018	10/10/2018		42.87	NE	<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
	MW10-ROX-011119	1/11/2019		43.06	NE	<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
	MW10-ROX-042219	4/22/2019		42.54	NE	<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
	MW10-ROX-071219	7/12/2019	44.43 - 54.43	39.33	NE	<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
MW-11	MW11-ROX-101216	10/12/2016	41.66 - 51.66	37.93	NE	<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
	MW11-ROX-011117	1/11/2017		37.63	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.00097 U	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW11-ROX-041417	4/14/2017		38.17	NE	<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
	MW11-ROX-071017	7/10/2017		36.39	NE	<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
	MW11-ROX-100917	10/9/2017		36.32	NE	<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
	MW11-ROX-011018	1/10/2018		39.00	NE	<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
	MW11-ROX-040618	4/6/2018		39.98	NE	<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
	MW11-ROX-070918	7/9/2018		40.54	NE	<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
	MW11-ROX-101118	10/11/2018		40.65	NE	<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
	MW11-ROX-011019	1/10/2019		40.45	NE	<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
	MW11-ROX-041119	4/11/2019		40.03	NE	<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
	MW11-ROX-070919	7/9/2019	41.66 - 51.66	35.95	NE	<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
MW-12	MW12-ROX-101116	10/11/2016	41.92 - 51.92	38.85	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	0.000052 J	<0.0002	<0.01	<0.0002	<0.01	0.000025 J	0.000036 J	<0.01 UJ	<0.02 UJ	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000029 J
	MW12-ROX-010917	1/9/2017		38.11	NE	<0.01	<0.01	<0.01	<0.01	0.00051 J B	<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
	MW12-ROX-041417	4/14/2017		38.50	NE	<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
	MW-12-ROX-07072017	7/7/2017		36.84	NE	<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
	MW12-ROX-100617	10/6/2017		37.23	NE	<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
	MW12-ROX-011118	1/11/2018		39.62	NE	<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
	MW12-ROX-040518	4/5/2018		40.50	NE	<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
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<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
	MW12-ROX-070618	7/6/2018		41.03	NE	<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
	MW12-ROX-101018	10/10/2018		40.84	NE	<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
	MW12-ROX-010919	1/9/2019		40.78	NE	<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
	MW12-ROX-010919-RE	1/9/2019		40.78	NE							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	<0.0095	<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
	MW12-ROX-071019	7/10/2019	41.92 - 51.92	35.87	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																	
						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
Screening Values (mg/L)						**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]
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-100716	10/7/2016	25.57 - 35.57	25.16	NE	<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
	MW13-ROX-010617	1/6/2017		25.54	NE	<0.01	<0.01 UJ	<0.01	<0.01	0.0005 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
	MW13-ROX-041317	4/13/2017		25.75	NE	<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
	MW13-ROX-070717	7/7/2017		23.64	NE	<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
	MW13-ROX-101017	10/10/2017		25.20	NE	<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
	MW13-ROX-010918	1/9/2018		27.20	NE	<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 UJ	<0.019 UJ	<0.00019	<0.0095	<0.00019
	MW13-ROX-040618	4/6/2018	24.80 - 34.80	27.71	NE	<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
	MW13-ROX-070918	7/9/2018		27.60	NE	<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
	MW13-ROX-101118	10/11/2018		27.66	NE	<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
	MW13-ROX-010719	1/7/2019		27.18	NE	<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
	MW13-ROX-041519	4/15/2019		26.44	NE	<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
	MW13-ROX-070919	7/9/2019	24.80 - 34.80	21.59	NE	<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
MW-14	MW14-ROX-101416	10/14/2016	33.42 - 43.42	29.62	NE	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	0.00055 J H J	<0.0095 UJ	<0.00019	0.00004 J *	<0.0095 UJ	<0.00019	<0.0095 UJ	0.000095 J J	0.000046 J J	<0.0095 UJ	<0.019 UJ	<0.0095 UJ	<0.0095 UJ	<0.019 UJ	<0.00019	<0.0095 UJ	<0.00019
	MW14-ROX-011117	1/11/2017		29.61	NE	<0.0098	<0.0098	<0.0098	<0.0098	0.0005 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
	MW14-ROX-041317	4/13/2017		29.54	NE	<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
	MW14-ROX-070717	7/7/2017		28.28	NE	<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
	MW14-ROX-101017	10/10/2017		29.44	NE	<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
	MW14-ROX-010918	1/9/2018		31.34	NE	<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 UJ	<0.019 UJ	<0.000014	<0.00071	<0.000014
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<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 UJ	<0.019 UJ	<0.00019	<0.0095	<0.00019
	MW14-ROX-041018	4/10/2018		31.96	NE	<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
	MW14-ROX-071118	7/11/2018		32.06	NE	<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
	MW14-ROX-101518	10/15/2018		32.32	NE	<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
	MW14-ROX-010919	1/9/2019		32.04	NE	<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
	MW14-ROX-041619	4/16/2019		31.06	NE	<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
	MW14-ROX-071019	7/10/2019	33.42 - 43.42	26.95	NE	<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
MW-16	MW16-ROX-101116	10/11/2016	37.06 - 47.06	39.64	NE	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.00002 J	0.000033 J	<0.0099 UJ	<0.02 UJ	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW16-ROX-010917	1/9/2017		39.15	NE	<0.0098	<0.0098	<0.0098	<0.0098	<0.00052 U	<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
	MW16-ROX-041417	4/14/2017		39.45	NE	<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
	MW16-ROX-071017	7/10/2017		38.16	NE	<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
	MW16-ROX-100617	10/6/2017		38.04	NE	<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
	MW16-ROX-010818	1/8/2018		40.71	NE	<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
	MW16-ROX-040618	4/6/2018	37.50 - 47.50	41.54	NE	<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
	MW16-ROX-070618	7/6/2018		42.35	NE	<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
	MW16-ROX-100518	10/5/2018		42.24	NE	<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
	MW16-ROX-011119	1/11/2019		42.10	NE	<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
	MW16-ROX-041219	4/12/2019		41.74	NE	<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
	MW16-ROX-070919	7/9/2019	37.50 - 47.50	37.55	NE	<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
MW-22	MW22-ROX-101716	10/17/2016	37.88 - 47.88	38.17	NE	<0.0098	<0.0098	0.035	<0.0098	<0.0098	<0.0098	<0.00098	<0.00098	<0.0098	<0.00098	<0.0098	0.0061	0.0079 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.00098	<0.0098	<0.00098
	MW22-ROX-101716-DUP	10/17/2016		38.17	NE	<0.0098	<0.0098	0.042	<0.0098	<0.0098 UJ	<0.0098	<0.00098	<0.00098	0.0076 J	<0.00098	<0.0098	0.0048	0.006 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.00098	<0.0098	<0.00098
	MW22-ROX-011217	1/12/2017		37.80	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.00056 U	<0.0093	<0.00093	<0.00093	0.0064 J	<0.00093	<0.0093	0.0055	0.0089	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00093	<0.0093	<0.00093
	MW22-ROX-011217-DUP	1/12/2017		37.80	NE	<0.01	<0.01	<0.01	<0.01	0.00073 J B	<0.01	<0.001	<0.001	0.0067 J	<0.001	<0.01	0.0057	0.0093	<0.01	<0.02	<0.01	<0.01	<0.02	<0.001	<0.01	<0.001
	MW22-ROX-041717	4/17/2017		38.24	NE	<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
	MW22-ROX-041717-DUP	4/17/2017		38.24	NE	<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
	MW22-ROX-071217	7/12/2017		36.83	NE	<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
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	<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
	MW22-ROX-101317	10/13/2017		36.94	NE	<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
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	<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
	MW22-ROX-011118	1/11/2018		39.25	NE	<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
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	<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
	MW22-ROX-041018	4/10/2018		NM	NE	<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
	MW22-ROX-071018	7/10/2018		40.88	NE	<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
	MW22-ROX-101518	10/15/2018	38.43 - 48.43	41.11	NE	<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
	MW22-ROX-010919	1/9/2019		40.91	NE	<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
	MW22-ROX-041719	4/17/2019		40.31	NE	<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

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																	
						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
Screening Values (mg/L)						**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]
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-100716	10/7/2016	29.02 - 39.02	26.64	NE	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.00002 J	0.000024 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW23-ROX-011017	1/10/2017		26.83	NE	<0.0096	<0.0096	<0.0096	0.004 J	<0.00052 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
	MW23-ROX-041117	4/11/2017		27.54	NE	<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
	MW23-ROX-071017	7/10/2017		25.13	NE	<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
	MW23-ROX-100517	10/5/2017		26.42	NE	<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
	MW23-ROX-010518	1/5/2018		28.52	NE	<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
	MW23-ROX-040918	4/9/2018		29.24	NE	<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
	MW23-ROX-070918	7/9/2018		29.10	NE	<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
	MW23-ROX-100918	10/9/2018		29.00	NE	<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
	MW23-ROX-010919	1/9/2019		28.96	NE	<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
	MW23-ROX-040919	4/9/2019		28.15	NE	<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
	MW23-ROX-071019	7/10/2019	29.02 - 39.02	23.01	NE	<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
MW-24	MW24-ROX-101116	10/11/2016	38.89 - 48.89	39.19	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000021 J	0.000029 J	<0.01 UJ	<0.02 UJ	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW24-ROX-010917	1/9/2017		38.97	NE	<0.0099	<0.0099	<0.0099	<0.0099	<0.00072 U	<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
	MW24-ROX-041717	4/17/2017		39.42	NE	<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
	MW24-ROX-070717	7/7/2017		37.68	NE	<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
	MW24-ROX-100617	10/6/2017		37.93	NE	<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
	MW24-ROX-010818	1/8/2018		40.36	NE	<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
	MW24-ROX-040618	4/6/2018	39.61 - 49.61	41.28	NE	<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
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<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
	MW24-ROX-070618	7/6/2018		41.87	NE	<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
	MW24-ROX-100518	10/5/2018		41.81	NE	<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
	MW24-ROX-011019	1/10/2019		41.76	NE	<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
	MW24-ROX-041219	4/12/2019		41.33	NE	<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
	MW24-ROX-070919	7/9/2019	39.61 - 49.61	37.04	NE	<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
MW-25	MW25-ROX-100616	10/6/2016	35.59 - 45.59	34.27	NE	<0.01	<0.01	<0.01	<0.01	0.00064 J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00021	0.000049 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	0.0095 J	<0.0002
	MW25-ROX-011117	1/11/2017		34.00	NE	<0.0097	<0.0097	<0.0097	<0.0097	0.00046 J	<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
	MW25-ROX-041117	4/11/2017		34.31	NE	<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
	MW25-ROX-071017	7/10/2017		32.75	NE	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.00019	<0.00019	<0.0096 UJ	<0.00019	<0.0096 UJ	0.000063 J	0.000032 J	<0.0096 UJ	<0.019 UJ	<0.0096 UJ	<0.0096 UJ	<0.019 UJ	<0.00019	<0.0096 UJ	<0.00019
	MW25-ROX-100517	10/5/2017		33.52	NE	<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
	MW25-ROX-010918	1/9/2018		35.80	NE	<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 UJ	<0.019 UJ	<0.0002	<0.01	<0.0002
	MW25-ROX-040918	4/9/2018		36.49	NE	<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
	MW25-ROX-071018	7/10/2018		36.71	NE	<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
	MW25-ROX-100818	10/8/2018		36.73	NE	<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
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.0095	<0.0095	<0.0095	<0.0095	0.00092 J	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW25-ROX-040819	4/8/2019		36.03	NE	<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
	MW25-ROX-070819	7/8/2019	35.59 - 45.59	31.52	NE	<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
MW-26	MW26-ROX-101016	10/10/2016	38.15 - 48.15	37.13	NE	<0.01	<0.01	<0.01	<0.01	0.00051 J J	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0001 J	0.00016 J	<0.01	<0.02 UJ	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW26-ROX-010617	1/6/2017		36.74	NE	<0.0093	<0.0093 UJ	<0.0093	<0.0093	0.00042 J	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW26-ROX-041417	4/14/2017		36.91	NE	<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
	MW26-ROX-070717	7/7/2017		35.61	NE	<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
	MW26-ROX-100517	10/5/2017		36.10	NE	<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
	MW26-ROX-010818	1/8/2018		38.41	NE	<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
	MW26-ROX-040518	4/5/2018		39.22	NE	<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
	MW26-ROX-070618	7/6/2018		39.73	NE	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	0.000026 J J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW26-ROX-100918	10/9/2018		39.53	NE	<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
	MW26-ROX-010919	1/9/2019		39.46	NE	<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
	MW26-ROX-041019	4/10/2019		38.90	NE	<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
	MW26-ROX-071019	7/10/2019	38.15 - 48.15	34.54	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101216	10/12/2016	39.79 - 49.79	38.50	NE	<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
	MW27-ROX-011117	1/11/2017		38.05	NE	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	MW27-ROX-041417	4/14/2017		38.72	NE	<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
	MW27-ROX-071017	7/10/2017		37.23	NE	<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
	MW27-ROX-100917	10/9/2017		37.17	NE	<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
	MW27-ROX-011018	1/10/2018		38.98	NE	<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
	MW27-ROX-040618	4/6/2018		40.34	NE	<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
	MW27-ROX-070918	7/9/2018		41.16	NE	<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
	MW27-ROX-100918	10/9/2018		41.06	NE	<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
	MW27-ROX-011119	1/11/2019		41.06	NE	<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
	MW27-ROX-041519	4/15/2019		40.99	NE	<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
	MW27-ROX-070919	7/9/2019	39.79 - 49.79	37.65	NE	<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
MW-28	MW28-ROX-101316	10/13/2016	33.61 - 43.61	37.86	NE	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000057 J	0.000034 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW28-ROX-011217	1/12/2017		37.14	NE	<0.0093	<0.0093	<0.0093	<0.0093	0.00049 J B	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	0.0028 J	<0.00019
	MW28-ROX-041717	4/17/2017		38.05	NE	<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
	MW28-ROX-071217	7/12/2017		36.48	NE	<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
	MW28-ROX-100917	10/9/2017		36.44	NE	<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
	MW28-ROX-011018	1/10/2018		38.18	NE	<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
	MW28-ROX-040618	4/6/2018		39.25	NE	<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
	MW28-ROX-070918	7/9/2018		40.08	NE	<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
	MW28-ROX-101118	10/11/2018		40.25	NE	<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
	MW28-ROX-010819	1/8/2019		40.32	NE	<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
	MW28-ROX-040919	4/9/2019		40.42	NE	<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
	MW28-ROX-071019	7/10/2019	33.61 - 43.61	37.14	NE	<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
P-54	P54-ROX-101216	10/12/2016	38.00 - 63.00	37.85	NE	<0.0098	<0.0098	<0.0098	<0.0098	0.00086 J	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000038 J	0.000043 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P54-ROX-010917	1/9/2017		37.80	NE	<0.01	<0.01	<0.01	<0.01	<0.00053 U	<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
	P54-ROX-041717	4/17/2017		38.30	NE	<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
	P54-ROX-071017	7/10/2017		36.35	NE	<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
	P54-ROX-100617	10/6/2017		36.79	NE	<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
	P54-ROX-011118	1/11/2018		39.10	NE	<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
	P54-ROX-040618	4/6/2018		40.05	NE	<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
	P54-ROX-070618	7/6/2018		40.51	NE	<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
	P54-ROX-100518	10/5/2018		40.46	NE	<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
	P54-ROX-011019	1/10/2019		40.37	NE	<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
	P54-ROX-041119	4/11/2019		39.91	NE	<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
	P54-ROX-070919	7/9/2019	38.00 - 63.00	35.60	NE	<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
P-56	P56-ROX-101716	10/17/2016	40.82 - 65.82	42.35	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0069	0.0029	<0.01	<0.02	<0.01	<0.01	<0.02	0.00079	<0.01	<0.0002
	P56-ROX-011217	1/12/2017		42.01	NE	<0.0097	<0.0097	<0.0097	<0.0097	<0.00078 U	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.023	0.025	<0.0097	0.0024 J	<0.0097	<0.0097	<0.019	0.0012	<0.0097	0.000029 J
	P56-ROX-040617	4/6/2017		42.46	NE	<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
	P56-ROX-071217	7/12/2017		41.11	NE	<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
	P56-ROX-101117	10/11/2017		41.08	NE	<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
	P56-ROX-011018	1/10/2018		43.63	NE	<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
	P56-ROX-041118	4/11/2018		44.40	NE	<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
	P56-ROX-071118	7/11/2018		45.25	NE	<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
	P56-ROX-101518	10/15/2018		45.37	NE	<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
	P56-ROX-011019	1/10/2019		45.16	NE	<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
	P56-ROX-041719	4/17/2019		44.38	NE	<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
	P56-ROX-071219	7/12/2019	40.82 - 65.82	40.50	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101816	10/18/2016	44.19 - 54.19	43.17	NE	0.00054 J	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00064	0.0013 J	<0.0002	<0.01	0.027	0.037	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	0.00064	1.1	<0.0002
	P57-ROX-011617	1/16/2017		42.82	NE	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00045	<0.0098	<0.0002	<0.0098	0.023	0.03	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00041	2.1	<0.0002
	P57-ROX-040717	4/7/2017		43.05	NE	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.001	0.00038 J J	0.001 J H J	<0.001	<0.0097 UJ	0.019	0.025	<0.0097 UJ	<0.019 UJ	<0.0097 UJ	<0.0097 UJ	<0.019 UJ	0.0002 J	0.95 H J	<0.001
	P57-ROX-071317	7/13/2017		41.95	NE	<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
	P57-ROX-101617	10/16/2017		42.64	NE	<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
	P57-ROX-011818	1/18/2018		44.86	NE	<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
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	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
	P57-ROX-041018	4/10/2018		45.45	NE	<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
	P57-ROX-071118	7/11/2018		45.76	NE	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
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<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
	P57-ROX-101618	10/16/2018		45.86	NE	<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
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<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
	P57-ROX-011419	1/14/2019		45.63	NE	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
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<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
	P57-ROX-041719	4/17/2019		44.89	NE	<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
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<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
	P57-ROX-071519	7/15/2019	44.19 - 54.19	40.82	NE	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
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	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
P-58	P58-ROX-101816	10/18/2016	40.21 - 65.21	41.05	NE	0.0014 J	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.00098	0.00094 J	0.0014 J	<0.00098	<0.0098	0.042	0.052	<0.0098	0.0034 J	<0.0098	<0.0098 UJ	<0.02	0.00087 J	0.6	0.00018 J
	P58-ROX-011617	1/16/2017		40.73	NE	0.0015 J	0.0013 J	<0.0095	<0.0095	0.00072 J	<0.0095	<0.00095	0.00098	0.0015 J	<0.00095	<0.0095	0.038	0.045	<0.0095	0.0041 J	<0.0095	<0.0095	<0.019	0.0008 J	0.33	0.00024 J
	P58-ROX-041117	4/11/2017		40.74	NE	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
	P58-ROX-071317	7/13/2017		39.88	NE	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.00039 UJ	0.00088 H J	<0.01 UJ	<0.00039 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
	P58-ROX-041118	4/11/2018		43.19	NE	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
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	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
	P58-ROX-101618	10/16/2018		43.66	NE	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
	P58-ROX-041719	4/17/2019		42.49	NE	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
	P58-ROX-071519	7/15/2019	40.21 - 65.21	38.43	NE	<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
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<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
P-59	P59-ROX-101816	10/18/2016	47.91 - 72.91	43.39	NE	<0.0098	<0.0098 UJ	0.045	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.022	0.037	<0.0098	<0.02	<0.0098	<0.0098 UJ	<0.02	<0.0002	0.094	<0.0002
	P59-ROX-011617	1/16/2017		42.83	NE	<0.0099	<0.0099	<0.0099	<0.0099	0.00077 J	<0.0099	<0.00099	0.00041 J	0.016	<0.00099	<0.0099	0.019	0.027	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.001	0.075	0.00014 J
	P59-ROX-040717	4/7/2017		43.31	NE	<0.0097 UJ	<0.0097 UJ	0.012 H J	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	0.00012 J	0.00023 J	0.016 H J	<0.00095	<0.0097 UJ	0.018	0.028	<0.0097 UJ	0.0034 J H J	<0.0097 UJ	<0.0097 UJ	<0.019 UJ	0.00043 J	0.047 H J	<0.00095
	P59-ROX-071317	7/13/2017		42.16	NE	<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
	P59-ROX-101317	10/13/2017		41.87	NE	<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
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	<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
	P59-ROX-011118	1/11/2018		44.44	NE	<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
	P59-ROX-041218	4/12/2018		45.13	NE	<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
	P59-ROX-071118	7/11/2018		46.16	NE	<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
	P59-ROX-101618	10/16/2018		45.99	NE	<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
	P59-ROX-011419	1/14/2019		46.10	NE	<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
P-66	P66-ROX-101416	10/14/2016	34.72 - 59.72	32.61	NE	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00095	0.001 *	0.0028 J H J	<0.00095	<0.0095 UJ	0.056	0.028	<0.0095 UJ	<0.019 UJ	<0.0095 UJ	<0.0095 UJ	<0.019 UJ	<0.00095	<0.0095 UJ	0.00011 J *
	P66-ROX-011117	1/11/2017		32.41	NE	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	<0.00097	0.006 J	<0.00097	<0.0097	0.011	<0.00097	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00097	<0.0097	0.00015 J
	P66-ROX-041317	4/13/2017		32.19	NE	<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
	P66-ROX-071217	7/12/2017		31.38	NE	<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
	P66-ROX-101017	10/10/2017		32.27	NE	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
	P66-ROX-011118	1/11/2018		34.09	NE	<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
	P66-ROX-041018	4/10/2018		34.93	NE	<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
	P66-ROX-071118	7/11/2018		35.10	NE	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
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	<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
	P66-ROX-101518	10/15/2018		35.31	NE	<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
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	<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
	P66-ROX-010919	1/9/2019		34.99	NE	<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
	P66-ROX-041619	4/16/2019		34.08	NE	<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
	P66-ROX-071019	7/10/2019		30.00	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101416	10/14/2016	44.43 - 69.43	39.44	NE	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	0.00047 J H J	<0.0095 UJ	<0.00019	0.000086 J *	<0.0095 UJ	<0.00019	<0.0095 UJ	0.0017	0.0018	<0.0095 UJ	<0.019 UJ	<0.0095 UJ	<0.0095 UJ	<0.019 UJ	0.000034 J * J	<0.0095 UJ	<0.00019
	P74-ROX-011217	1/12/2017		38.64	NE	<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	0.000037 J
	P74-ROX-040717	4/7/2017		38.92	NE	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.00022	<0.00022	<0.01 UJ	<0.00022	<0.01 UJ	<0.00022	<0.00022	<0.01 UJ	<0.021 UJ	<0.01 UJ	<0.01 UJ	<0.021 UJ	<0.00022	<0.01 UJ	<0.00022
	P74-ROX-071217	7/12/2017		38.08	NE	<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
	P74-ROX-101617	10/16/2017		38.57	NE	<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
	P74-ROX-011018	1/10/2018		40.25	NE	<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
	P74-ROX-041018	4/10/2018	43.83 - 68.83	40.69	NE	<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
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<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
	P74-ROX-071118	7/11/2018		42.22	NE	<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
	P74-ROX-101618	10/16/2018		42.18	NE	<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
	P74-ROX-011019	1/10/2019		42.14	NE	<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
	P74-ROX-041719	4/17/2019		41.57	NE	<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
	P74-ROX-071219	7/12/2019	43.83 - 68.83	37.95	NE	<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
P-93A	P93A-ROX-101816	10/18/2016	43.07 - 53.07	41.35	NE	<0.01	<0.01 UJ	<0.01	<0.01	0.00093 J J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00014 J	0.000068 J	<0.01	<0.02	0.00067 J	<0.01 UJ	<0.02	<0.0002	0.042	<0.0002
	P93A-ROX-101816-DUP	10/18/2016		41.35	NE	<0.01	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00018 J	0.000093 J	<0.01	<0.02	0.0017 J	<0.01 UJ	<0.02	<0.0002	0.051	<0.0002
	P93A-ROX-011217	1/12/2017		41.04	NE	<0.0098	<0.0098	<0.0098	<0.0098	0.0008 J B	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.00013 J	0.000095 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P93A-ROX-011217-DUP	1/12/2017		41.04	NE	<0.011	<0.011	<0.011	<0.011	0.0006 J B	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	0.00015 J	0.0001 J	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	P93A-ROX-040717	4/7/2017		41.26	NE	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	0.000045 J	<0.00019	<0.0095 UJ	0.0002	<0.0095 UJ	<0.00019	<0.00019	<0.0095 UJ	<0.019 UJ	<0.0095 UJ	<0.0095 UJ	<0.019 UJ	<0.00019	0.0077 J H J	0.000035 J
	P93A-ROX-040717-DUP	4/7/2017		41.26	NE	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.00021	<0.00021	<0.011 UJ	0.000046 J	<0.011 UJ	<0.00021	<0.00021	<0.011 UJ	<0.021 UJ	<0.011 UJ	<0.011 UJ	<0.021 UJ	<0.00021	0.01 J H J	<0.00021
	P93A-ROX-071317	7/13/2017		40.11	NE	<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
	P93A-ROX-101117	10/11/2017		40.87	NE	<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
	P93A-ROX-011118	1/11/2018		42.71	NE	<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
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<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
	P93A-ROX-041118	4/11/2018		NM	NE	<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
	P93A-ROX-052218	5/22/2018		NM	NE																					
	P93A-ROX-071218	7/12/2018		44.03	NE	<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
	P93A-ROX-101618	10/16/2018		44.05	NE	<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
	P93A-ROX-011419	1/14/2019		43.78	NE	<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
	P93A-ROX-041819	4/18/2019		42.98	NE	<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
	P93A-ROX-071519	7/15/2019	43.07 - 53.07	38.92	NE	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00075	0.00012 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.048	<0.00019
P-93B	P93B-ROX-101816	10/18/2016	74.60 - 76.60	42.73	NE	<0.01	<0.01 UJ	<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 UJ	<0.02	<0.0002	0.085	<0.0002
	P93B-ROX-011017	1/10/2017		42.41	NE	<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	0.35	<0.0002
	P93B-ROX-011017-DUP	1/10/2017		42.41	NE	<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	0.17	<0.0002
	P93B-ROX-040617	4/6/2017		42.59	NE	<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
	P93B-ROX-071117	7/11/2017		41.59	NE	<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
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<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
	P93B-ROX-101117	10/11/2017		42.21	NE	<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
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<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
	P93B-ROX-011518	1/15/2018		44.42	NE	<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
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<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
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<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
	P93B-ROX-071218	7/12/2018		45.36	NE	<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
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<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
	P93B-ROX-101518	10/15/2018		45.64	NE	<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
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<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
	P93B-ROX-011119	1/11/2019		45.15	NE	<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
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<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
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<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
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<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
	P93B-ROX-071219	7/12/2019	74.78 - 76.78	40.35	NE	<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
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						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]
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-101816	10/18/2016	92.47 - 97.47	42.49	NE	<0.0095	<0.0095 UJ	<0.0095	<0.0095	0.00046 J	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000048 J	0.000063 J	<0.0095	<0.019	<0.0095	<0.0095 UJ	<0.019	<0.00019	<0.0095	<0.00019
	P93C-ROX-011117	1/11/2017		42.20	NE	<0.0098	<0.0098	<0.0098	<0.0098	0.00062 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
	P93C-ROX-040517	4/5/2017		42.19	NE	<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
	P93C-ROX-071217	7/12/2017		41.30	NE	<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
	P93C-ROX-101117	10/11/2017		42.04	NE	<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
	P93C-ROX-011118	1/11/2018		43.95	NE	<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
	P93C-ROX-041118	4/11/2018	92.88 - 97.88	44.69	NE	<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
	P93C-ROX-071218	7/12/2018		45.22	NE	<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
	P93C-ROX-101518	10/15/2018		45.31	NE	<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
	P93C-ROX-011019	1/10/2019		45.01	NE	<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
	P93C-ROX-041819	4/18/2019		44.15	NE	<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
	P93C-ROX-071219	7/12/2019	92.88 - 97.88	40.18	NE	<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
P-93D	P93D-ROX-101716	10/17/2016	125.75 - 127.75	42.78	NE	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<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
	P93D-ROX-011017	1/10/2017		42.59	NE	<0.0097	<0.0097	<0.0097	<0.0097	<0.0005 U	<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
	P93D-ROX-040617	4/6/2017		42.80	NE	<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
	P93D-ROX-071117	7/11/2017		41.64	NE	<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
	P93D-ROX-101117	10/11/2017		42.42	NE	<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
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00019 UJ	<0.00019 UJ	<0.0095 UJ	<0.00019 UJ	<0.0095 UJ	<0.00019 UJ	<0.00019 UJ	<0.0095 UJ	<0.019 UJ	<0.0095 UJ	<0.0095 UJ	<0.019 UJ	<0.00019 UJ	<0.0095 UJ	<0.00019 UJ
	P93D-ROX-041218	4/12/2018		45.95	NE	<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
	P93D-ROX-071218	7/12/2018		45.57	NE	<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
	P93D-ROX-101518	10/15/2018		45.70	NE	<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
	P93D-ROX-011119	1/11/2019		45.31	NE	<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
	P93D-ROX-041819	4/18/2019		44.50	NE	<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
	P93D-ROX-071219	7/12/2019	125.75 - 127.75	40.53	NE	<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
P-114R	P114R-ROX-100716	10/7/2016	23.01 - 33.01	23.89	NE	<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
	P114R-ROX-010617	1/6/2017		24.81	NE	<0.01	<0.01 UJ	<0.01	<0.01	<0.00063 U	<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
	P114R-ROX-041317	4/13/2017		25.05	NE	<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
	P114R-ROX-071117	7/11/2017		22.45	NE	<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
	P114R-ROX-101017	10/10/2017		24.45	NE	<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
	P114R-ROX-010918	1/9/2018		26.37	NE	<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 UJ	<0.019 UJ	<0.00095	<0.0095	<0.00095
	P114R-ROX-040618	4/6/2018		26.76	NE	<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
	P114R-ROX-070918	7/9/2018		26.38	NE	<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
	P114R-ROX-101118	10/11/2018		26.27	NE	<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
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<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
	P114R-ROX-010719	1/7/2019		25.88	NE	<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
	P114R-ROX-041519	4/15/2019		24.70	NE	<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
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<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
	P114R-ROX-070919	7/9/2019	23.01 - 33.01	19.48	NE	<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
ROST-3-MW	ROST3MW-ROX-101316	10/13/2016	37.81 - 47.81	38.19	NE	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00011 J	<0.0098	<0.0002	<0.0098	0.0033	0.0034	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00019 J	<0.0098	<0.0002
	ROST3MW-ROX-011117	1/11/2017		37.50	NE	<0.0093	0.00068 J	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.00019	<0.0093	<0.00019	<0.0093	0.0038	<0.00019	<0.0093	<0.019	<0.0093	<0.0093	<0.019	<0.00019	<0.0093	<0.00019
	ROST3MW-ROX-041417	4/14/2017		38.16	NE	<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
	ROST3MW-ROX-071117	7/11/2017		36.61	NE	<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
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<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
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE																					
	ROST3MW-ROX-011518	1/15/2018		40.00	NE	<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
	ROST3MW-ROX-022618	2/26/2018		40.00	NE																					
	ROST3MW-ROX-040618	4/6/2018		39.98	NE	<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
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<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
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<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
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<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
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<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
	ROST3MW-ROX-071119	7/11/2019	37.81 - 47.81	36.38	NE	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																		
						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
Screening Values (mg/L)						**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]
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-101316	10/13/2016	34.95 - 44.95	38.45	NE	0.00083 J	0.00074 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.00059	<0.0096	<0.00019	<0.0096	0.057	0.063	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00098	<0.0096	0.000023 J
	ROST4PZC-ROX-011217	1/12/2017		37.88	NE	0.00077 J	0.00084 J	<0.0094	<0.0094	0.00057 J B	<0.0094	0.00002 J	0.00093	<0.0094	<0.00019	<0.0094	0.048	0.057	<0.0094	<0.019	<0.0094	<0.0094	<0.019	0.0022	<0.0094	0.000048 J
	ROST4PZC-ROX-041717	4/17/2017		38.24	NE	<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
	ROST4PZC-ROX-071217	7/12/2017		37.20	NE	<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
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	<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
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<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
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<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
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<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
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	<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
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	<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
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	<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
	ROST4PZC-ROX-071219	7/12/2019	34.95 - 44.95	37.64	NE	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
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	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
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	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
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	<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
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	<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
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.0002	<0.0002	<0.049	<0.0002	<0.049	0.0051	0.004	<0.049	<0.098	<0.049	<0.049	<0.098	0.0028	<0.049	<0.0002
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	<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
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	<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
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	<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
	ROST4PZE-ROX-071219	7/12/2019	34.75 - 44.75	37.18	NE	<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
ROST-4-PZ(G)	ROST4PZG-ROX-101217	10/12/2017	34.28 - 44.28	36.58	NE	<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
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<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
	ROST4PZG-ROX-040918	4/9/2018		40.07	NE	<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
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<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
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<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
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<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
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<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
	ROST4PZG-ROX-071219	7/12/2019	34.28 - 44.28	36.60	NE	<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
T-12	T12-ROX-101716	10/17/2016	46.83 - 72.83	41.19	NE	<0.0098	<0.0098	0.02	<0.0098	<0.0098	<0.0098	<0.0002	0.00028	<0.0098	<0.0002	<0.0098	0.017	0.021	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0006	0.073	<0.0002
	T12-ROX-011217	1/12/2017		40.70	NE	<0.0098	<0.0098	0.0047 J	<0.0098	0.00053 J B	<0.0098	<0.0002	<0.0002	0.0018 J	<0.0002	<0.0098	0.0039	0.00028	<0.0098	0.001 J	<0.0098	<0.0098	<0.02	<0.0002	0.13	0.00007 J
	T12-ROX-040617	4/6/2017		41.18	NE	<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
	T12-ROX-071317	7/13/2017		40.10	NE	<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
	T12-ROX-101317	10/13/2017		39.48	NE	<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
	T12-ROX-011018	1/10/2018		42.14	NE	<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
	T12-ROX-041218	4/12/2018		43.03	NE	<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
	T12-ROX-071118	7/11/2018		44.12	NE	<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
	T12-ROX-101618	10/16/2018		43.90	NE	<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
	T12-ROX-011019	1/10/2019		44.00	NE	<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
	T12-ROX-041719	4/17/2019		43.38	NE	<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
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																					
	T12-ROX-071519	7/15/2019	46.83 - 72.83	39.74	NE	<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

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 P-55R, P-59, and P-68, contained LNAPL, and MW-22 was inaccessible due to a parked vehicle; 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:

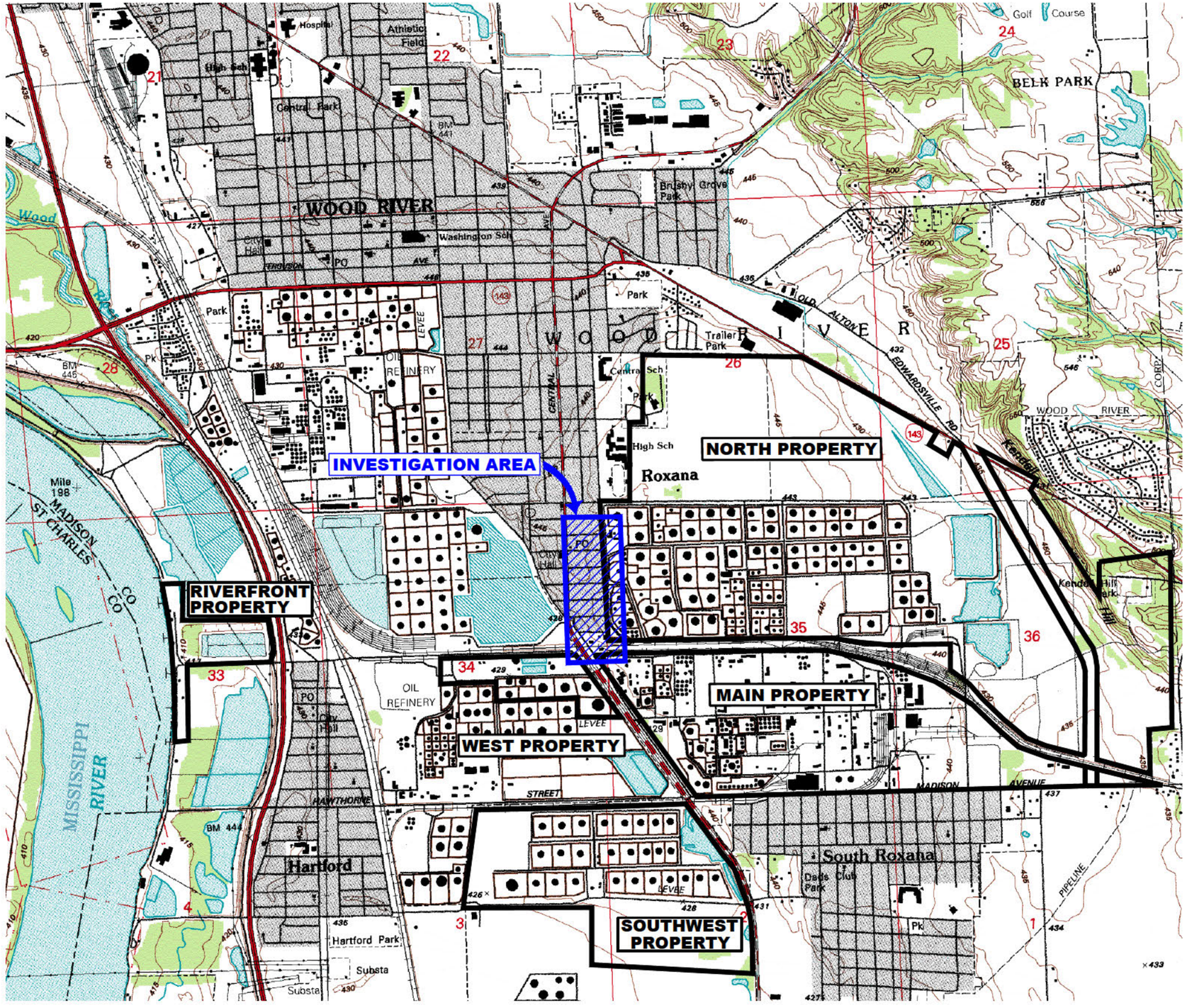
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

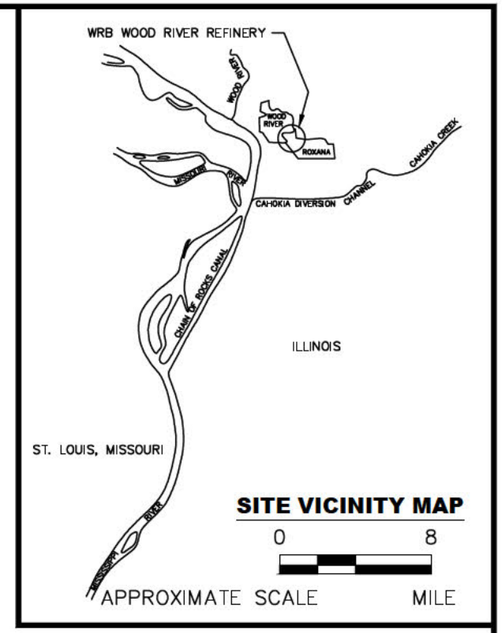
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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. 60592794
AECOM	
DRN. BY:asd September 2019 DSGN. BY: djd CHKD. BY:bJ	Investigation Area Location Map
	FIG. NO. 1

File: G:\STLOUIS\DGS PROJECTS\ENV SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW 3Q19\DRAFT\FIGURES\FIGURE 1 INVESTIGATION AREA LOCATION MAP.DWG Last edited: 09/12/19 @ 1:20 PM @ WCC-STLOUIS

File: G:\STLOUIS\DCS\PROJECTS\ENV\SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW\3Q19\DRAFT\FIGURES\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Aug. 12, 19 @ 4:08 PM by: alyssa.davis2

LEGEND

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

FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
VILLAGE OF ROXANA
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
2ND STREET
RAND AVENUE
NORTH PROPERTY
MAIN PROPERTY
WEST PROPERTY
BP
1986 APPROXIMATE BENZENE RELEASE SITE

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

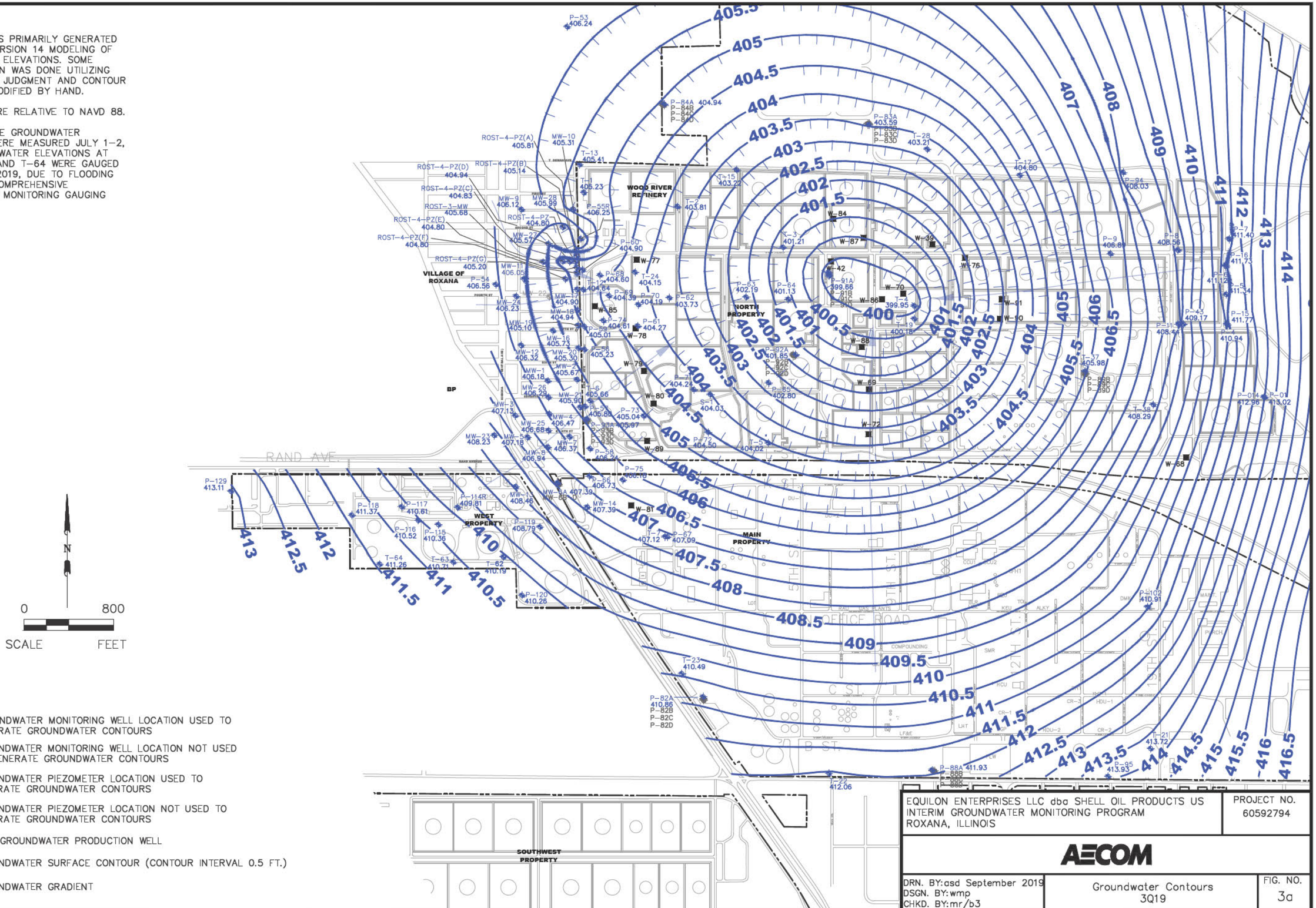
0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60592794
AECOM		
DRN. BY:asd September 2019 DSGN. BY:mr 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 JULY 1–2, 2019. GROUNDWATER ELEVATIONS AT T–62, T–63, AND T–64 WERE GAUGED ON JULY 30, 2019, DUE TO FLOODING DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT.



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 (CONTOUR INTERVAL 0.5 FT.)
- GROUNDWATER GRADIENT

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

PROJECT NO. 60592794

AECOM

DRN. BY:asd September 2019
DSGN. BY:wmp
CHKD. BY:mr/b3

Groundwater Contours
3Q19

FIG. NO. 3a

File: G:\STLOUIS\DCS\PROJECTS\ENV\SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW\3Q19\DRAFT\FIGURES\FIGURE 3A ROXANA 3Q19 CONTOUR MAP (800 SCALE).DWG Last edited: Sep. 5, 19 @ 12:40 PM by: wendy.pennington

File: G:\STLOUIS\DCS\PROJECTS\ENV\SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW\3Q19\DRAFT\FIGURES\FIGURE 3B ROXANA 3Q19 CONTOUR MAP1.DWG Last edited: Sep. 11, 19 @ 11:12 AM by: wendy.pennington

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
- —402— GROUNDWATER SURFACE CONTOUR (CONTOUR INTERVAL 0.5 FT)
- GROUNDWATER GRADIENT

NOTES:
1. CONTOUR LINES PRIMARILY GENERATED BY SURFER VERSION 14 MODELING OF GROUNDWATER ELEVATIONS. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
2. ELEVATIONS ARE RELATIVE TO NAVD 88.
3. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JULY 1–2, 2019.

FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
RAND AVENUE
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
1ST STREET
2ND STREET
NORTH PROPERTY
WEST PROPERTY
MAIN PROPERTY
VILLAGE OF ROXANA
WOOD RIVER REFINERY
PUBLIC WORKS YARD
BP
1986 APPROXIMATE BENZENE RELEASE SITE

T-1 405.23
MW-10 405.31
MW-9 406.12
MW-28 405.99
ROST-4-PZ(A) 405.81
P-55R 406.25
ROST-4-PZ 404.80
ROST-4-PZ(B) 405.14
MW-27 405.57
ROST-4-PZ(D) 404.94
ROST-4-PZ(C) 404.83
W–77
P-60 404.90
ROST-3-MW 405.68
ROST-4-PZ(E) 404.80
P-68 404.60
A–28
T-24 404.15
MW-11 406.05
ROST-4-PZ(G) 405.20
ROST-4-PZ(F) 404.80
P-54 406.56
MW-17 404.90
T-12 404.64
MW-24 406.23
MW-22
P-69 404.39
P-70 404.19
A–27
W–85
MW-18 404.94
P-71
MW-19 405.10
P-61 404.27
P-59 405.01
W–78
MW-16 405.73
MW-20 405.30
MW-12 406.32
P-56 405.23
MW-2 405.67
MW-1 406.18
W–79
MW-26 406.29
MW-21 405.90
T-6 405.66
P-57 405.80
MW-3 407.13
MW-4 406.47
P-73 405.04
P-93A 405.97
P-93B
P-93C
P-93D
MW-25 406.68
MW-5 407.18
MW-23 408.23
MW-7 406.47
W–89
MW-8 406.94
P-58 406.24
P-66 406.73
P-75 406.18
MW-13 408.46
MW-6A 407.39
MW-6B
MW-6C
MW-6D
MW-14 407.39
W–81
P-114R 409.81

404.5 405 405.5 406 406.5 407 407.5 408 408.5 409 409.5 410

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60592794
AECOM	
DRN. BY: asd September 2019 DSGN. BY: djd CHKD. BY: mr/b3	Groundwater Contours 3Q19– West Fenceline FIG. NO. 3b

File: G:\STLOUIS\DCS\PROJECTS\ENV\SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW\3Q19\DRAFT\FIGURES\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE).DWG Last edited: Aug. 30, 19 @ 10:42 AM by: wendy.pennington

LEGEND

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

NOTE:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCELINE AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 1–2, 2019.
3. LNAPL THICKNESS AT P–59 WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON JULY 15, 2019. LNAPL WAS NOT DETECTED AT P–59 DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 1–2, 2019.

P–84A
P–84B
P–84C
P–84D
TYDEMAN AVE
FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
VILLAGE OF ROXANA
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFEE AVE
NORTH PROPERTY
WOOD RIVER REFINERY
MAIN PROPERTY
WEST PROPERTY
PUBLIC WORKS YARD
1986 APPROXIMATE BENZENE RELEASE SITE
RAND AVENUE
BP
MW–9
MW–10
MW–28
MW–27
MW–11
MW–24
MW–22
MW–17
MW–18
MW–19
MW–16
MW–12
MW–20
MW–2
MW–1
MW–26
MW–21
MW–3
MW–4
MW–25
MW–23
MW–5
MW–8
MW–7
MW–13
MW–6
MW–14
ROST–4–PZ(A)
ROST–4–PZ(B)
ROST–4–PZ(C)
ROST–4–PZ(D)
ROST–4–PZ(E)
ROST–4–PZ(F)
ROST–4–PZ(G)
ROST–3–MW
ROST–4–PZ
P–54
P–55R 0.10 0.50*
P–68 0.10 0.13*
P–60
P–59 0.01*
P–56
P–57
P–93A
P–93B
P–93C
P–93D
P–58
P–66
P–75
P–69
P–74
P–70 0.01*
P–61 0.01*
P–62 0.01 0.03*
P–71
P–72
P–73
P–117
P–114R
P–116
P–115
P–119
T–13
T–1
T–2
T–12
T–24 0.10 0.52*
T–6
T–7
S–1 0.01 0.02
P–67 0.01 0.04*
W–85
R–77 W–77 0.10
R–78 W–78
R–79 W–79
R–80 W–80
R–89 W–89
R–81 W–81
A–28
A–33
A–27

0 300
SCALE FEET
N

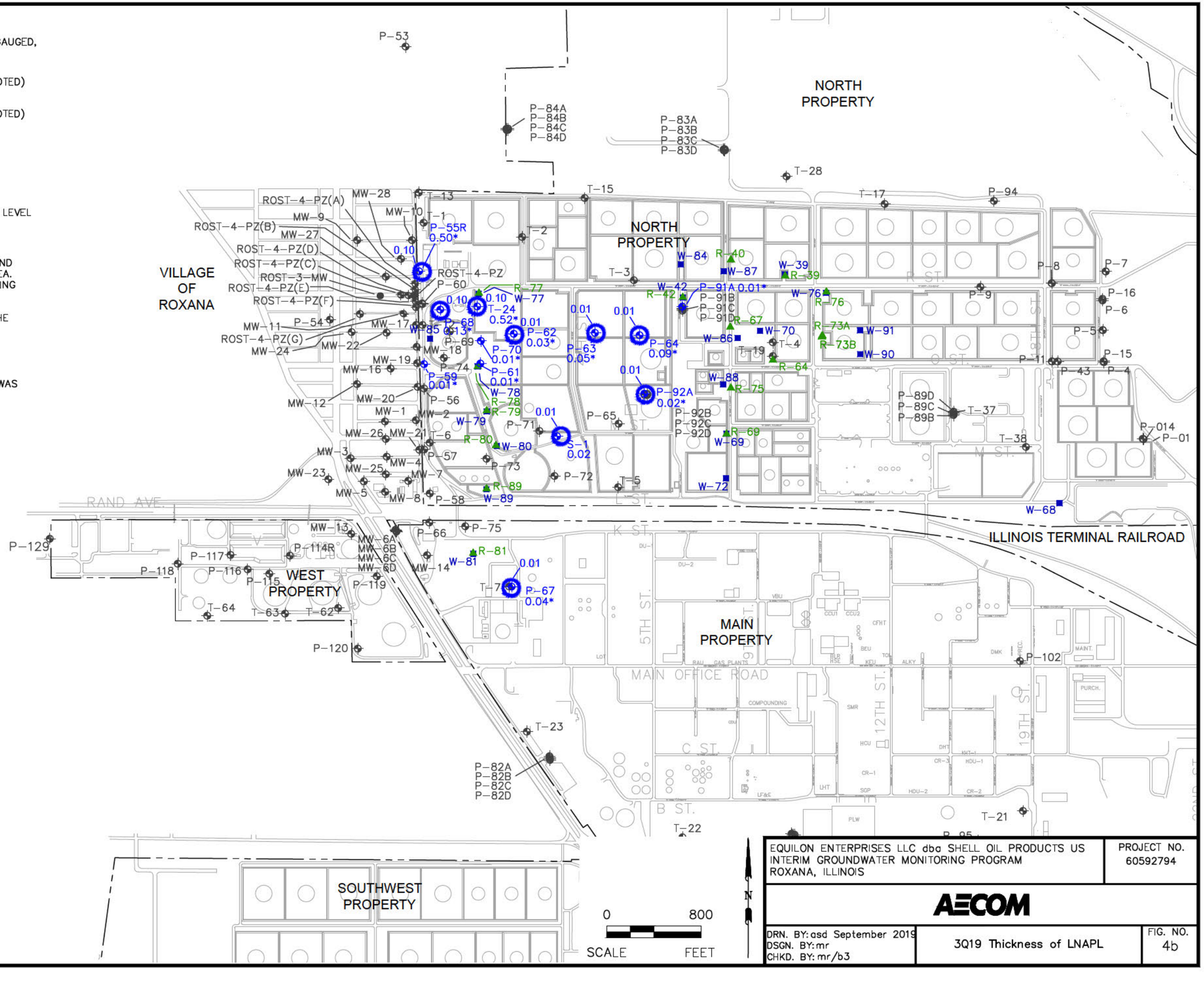
EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60592794
AECOM	
DRN. BY:asd September 2019 DSGN. BY:mr CHKD. BY:mr\b3	3Q19 Thickness of LNAPL – West Fenceline
	FIG. NO. 4a

LEGEND

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

NOTES:

1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WRR AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 1–2, 2019.
3. LNAPL THICKNESS AT P–59 WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON JULY 15, 2019. LNAPL WAS NOT DETECTED AT P–59 DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 1–2, 2019.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60592794
AECOM		
DRN. BY: asd September 2019 DSGN. BY: mr CHKD. BY: mr/b3	3Q19 Thickness of LNAPL	FIG. NO. 4b

File: G:\STLOUIS\DOCS\PROJECTS\ENVSHELL\60592794_ROXANA_2019\300_DELIVERABLES_(DTE)\WORD\QUARTERLY GW MONITORING PROGRESS REPORTS\FIGURES OF LNAPL (REFINERY).DWG Last edited: Aug. 30, 19 @ 10:48 AM by: wendy.pennington

File: G:\STLOUIS\DGS\PROJECTS\ENV\SHELL\60592794_ROXANA_2019\500_DELIVERABLES_(DELIV)\QUARTERLY_GW\3Q19\DRAFT\FIGURES\FIGURE_5_3Q19_GROUNDWATER_ANALYTICAL_RESULTS_SUMMARY.DWG Last edited: Aug. 15, 19 @ 12:50 PM by: alyssa.davis2

LEGEND

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

NOTES:

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

Analyte	Screening Criteria (mg/L)
Benzene	0.005
Ethylbenzene	0.7
Toluene	1
1,3,5-Trimethylbenzene	0.07
Benzo(a)anthracene	0.00013
Benzo(a)pyrene	0.0002
Benzo(b)fluoranthene	0.00018
Benzo(k)fluoranthene	0.00017
2-Methylnaphthalene	0.028
3 & 4-Methylphenol (m & p-Cresol)	0.35
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., 1300/1400) 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–59, AND P–68 WERE NOT SAMPLED DURING 3Q19 DUE TO THE PRESENCE OF LNAPL.
6. WELL MW–22 WAS NOT SAMPLED DURING 3Q19 DUE TO INACCESSIBILITY.

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

SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SEVENTH ST
EIGHTH ST
RAND AVENUE
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
2ND STREET

NORTH PROPERTY
WOOD RIVER REFINERY
VILLAGE OF ROXANA
WEST PROPERTY
MAIN PROPERTY
BP

1986 APPROXIMATE BENZENE RELEASE SITE

Sample Location	ROST-4-PZ(C)
Sampled 7/12/19	Result (mg/L)
Benzene	0.0077
2-Methylnaphthalene	0.066 H J

Sample Location	ROST-3-MW
Sampled 7/11/19	Result (mg/L)
Benzene	0.0081

Sample Location	ROST-4-PZ(E)
Sampled 7/12/19	Result (mg/L)
Benzene	0.11

Sample Location	T-12
Sampled 7/15/19	Result (mg/L)
Benzene	1.7
2-Methylnaphthalene	0.034

Sample Location	P-56
Sampled 7/12/19	Result (mg/L)
Benzene	0.0064
3 & 4-Methylphenol (m & p-Cresol)	1.8 H J

Sample Location	MW-2
Sampled 7/9/19	Result (mg/L)
Ethylbenzene	1.2
1,3,5-Trimethylbenzene	0.11
2-Methylnaphthalene	0.031

Sample Location	P-93A	P-93B
Sampled 7/12/19, 7/15/19	Result (mg/L)	Result (mg/L)
Benzene	10	170 J / 220 J
Phenol		0.26 H J / 0.24 H J

Sample Location	MW-5
Sampled 7/12/19	Result (mg/L)
Benzene	0.01

Sample Location	P-57
Sampled 7/15/19	Result (mg/L)
Benzene	15 / 16
2-Methylnaphthalene	0.045 / 0.047
Phenol	0.37 / 0.31

Sample Location	MW-25
Sampled 7/8/19	Result (mg/L)
Benzene	0.016

Sample Location	MW-7
Sampled 7/8/19	Result (mg/L)
Benzene	1300 / 1400
Toluene	1.5 / 1.5

Sample Location	MW-8
Sampled 7/8/19	Result (mg/L)
Benzene	280
Pentachlorophenol	0.0025 J
Phenol	0.31

Sample Location	P-58
Sampled 7/15/19	Result (mg/L)
Benzene	87 / 86
Benzo(a)anthracene	0.00079 J / 0.0015 J
Benzo(a)pyrene	0.00073 J / 0.0014 J
Benzo(b)fluoranthene	0.0008 / 0.0011
Benzo(k)fluoranthene	<0.0002 / 0.00021
2-Methylnaphthalene	0.033 J / 0.04
Phenol	0.12 / 0.15

Sample Location	MW-6D
Sampled 7/11/19	Result (mg/L)
Benzene	0.0056

0 200
SCALE FEET

N

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

PROJECT NO. 60592794

AECOM

DRN. BY:asd September 2019
DSGN. BY:mr
CHKD. BY:mr/b3

3Q19
Groundwater Monitoring Well
Analytical Exceedances

FIG. NO. 5

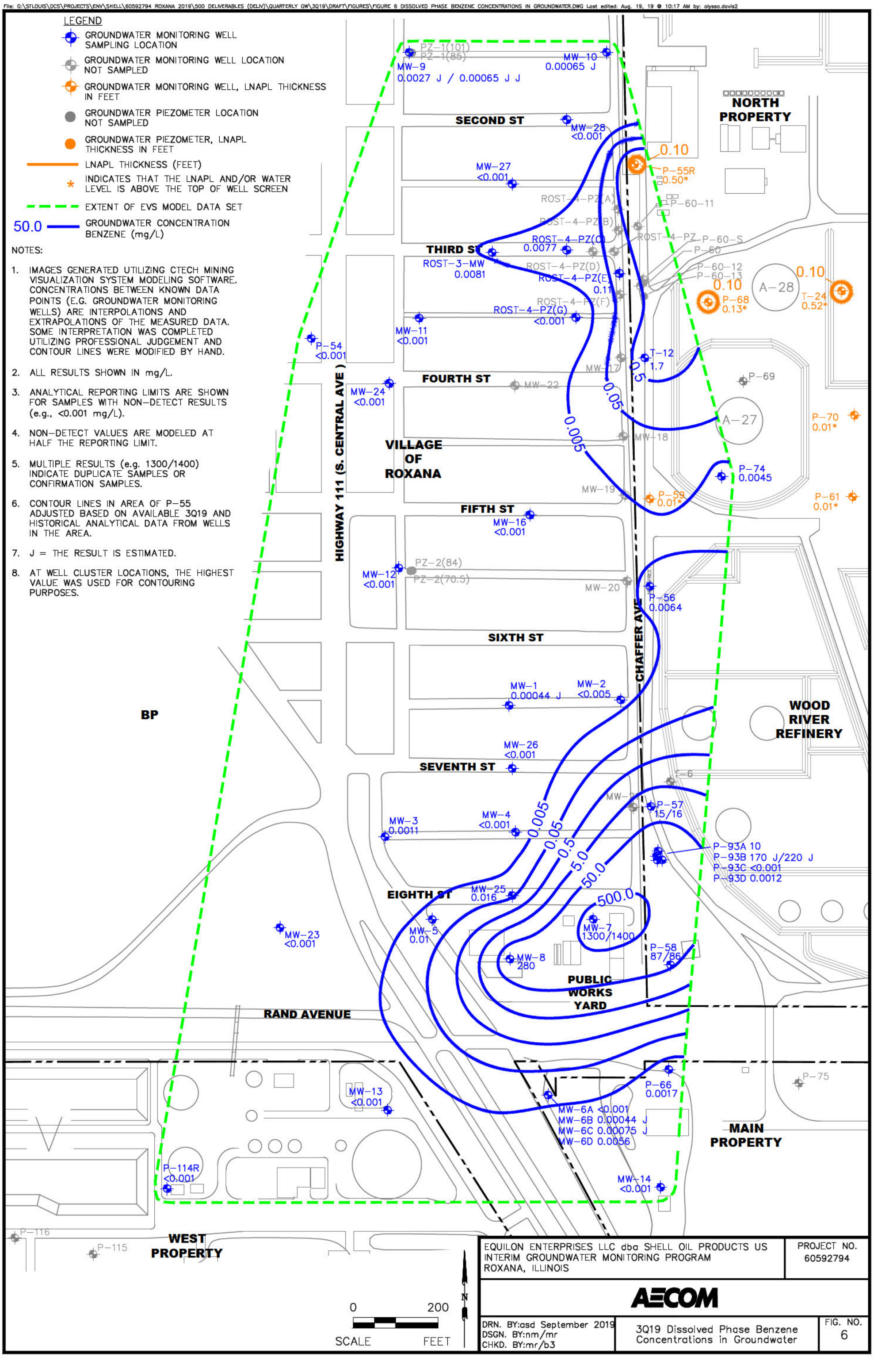
File: G:\STLOUIS\DCS\PROJECTS\ENV\SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW\3Q19\DRAFT\FIGURES\FIGURE 6 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Aug. 19, 19 @ 10:17 AM by: olysso.davis2

LEGEND

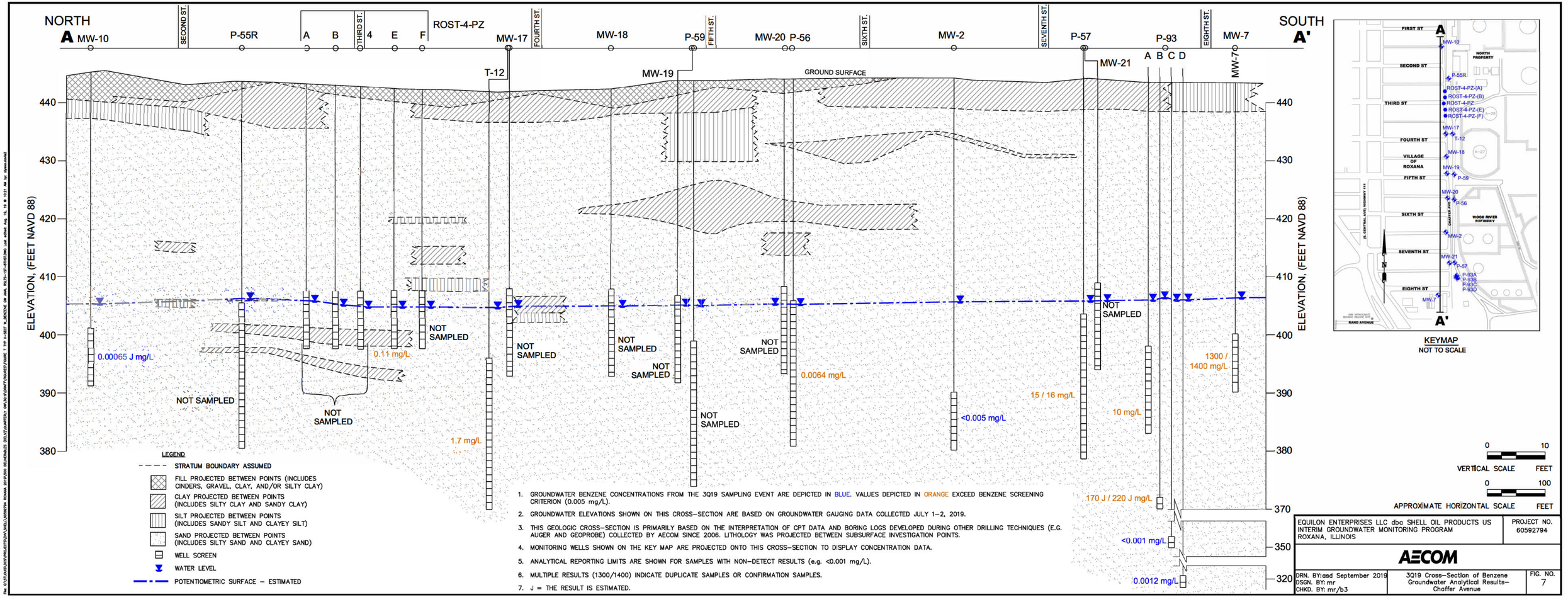
- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER MONITORING WELL, LNAPL THICKNESS IN FEET
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER, LNAPL THICKNESS IN FEET
- LNAPL THICKNESS (FEET)
- * INDICATES THAT THE LNAPL 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. 1300/1400) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55 ADJUSTED BASED ON AVAILABLE 3Q19 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. 60592794
AECOM	
DRN. BY:asd September 2019 DSGN. BY:nm/mr CHKD. BY:mr/b3	3Q19 Dissolved Phase Benzene Concentrations in Groundwater
	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q19 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 1–2, 2019.
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 (1300/1400) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.

KEYMAP
NOT TO SCALE

0 10
VERTICAL SCALE FEET

0 100
APPROXIMATE HORIZONTAL SCALE FEET

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

PROJECT NO. 60592794

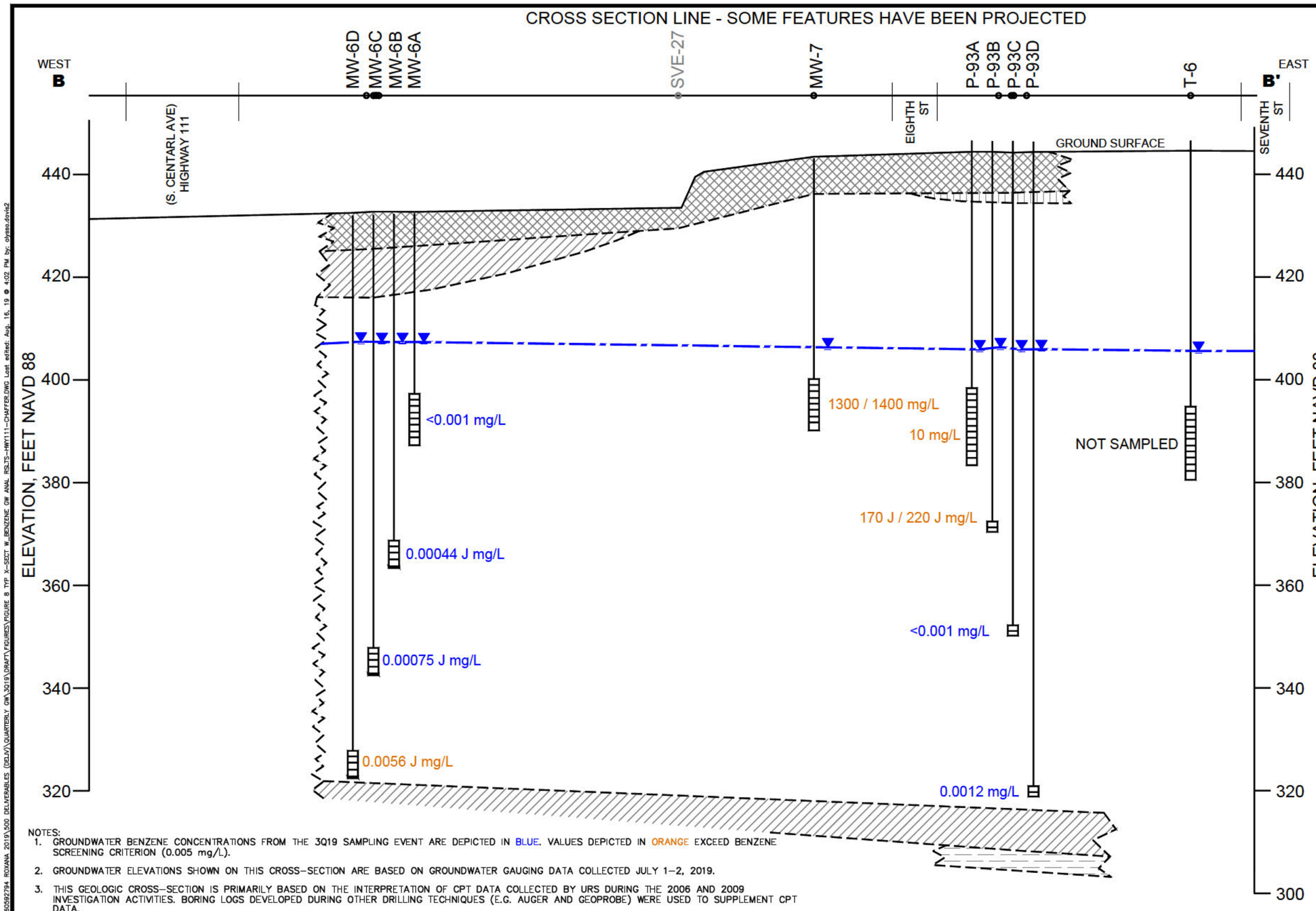
AECOM

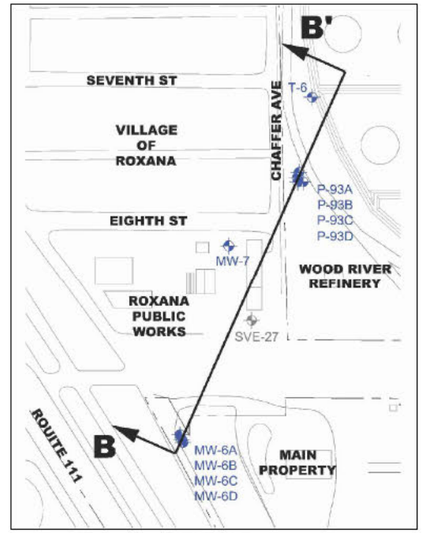
DRN. BY: asd September 2019
DSGN. BY: mr
CHKD. BY: mr/b3

3Q19 Cross-Section of Benzene Groundwater Analytical Results–Chaffer Avenue

FIG. NO. 7

CROSS SECTION LINE - SOME FEATURES HAVE BEEN PROJECTED





KEYMAP
NOT TO SCALE

LEGEND

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

VERTICAL SCALE 0 20 FEET

HORIZONTAL SCALE 0 100 FEET

NOTES:

1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q19 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 1–2, 2019.
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 (1300/1400) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60592794
AECOM		
DRN. BY:asd September 2019 DSGN. BY:mr CHKD. BY:mr/b3	3Q19 Cross-Section of Benzene Groundwater Analytical Results–Roxana Public Works Yard	FIG. NO. 8

File: G:\STLOUIS\DGS\PROJECTS\ENV\SHELL\60592794 ROXANA 2019\500 DELIVERABLES (DELIV)\QUARTERLY GW\2019\DRAFT\FIGURES\FIGURE 8 TYP X-SECT W_BENZENE GW ANAL RSLTS-HWY111-CHAFFER.DWG Last edited: Aug. 16, 19 @ 4:02 PM by: dlyons.dlvis2

Appendix A

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: I. PARTIN, T. JONES

DATE: 7-11-19 WEATHER: CLOUDY 80°

MONITORING WELL ID: MW-1 SAMPLE ID: MW1-ROX-071119

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~53.80 ft btoc
Total Well Depth (btoc): 59.13 ft	
Depth to Water (btoc): 36.12 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): 48.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 22.95 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

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

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	36.22	CLEAR	NONE	19.3	1.30	0.811 mS/cm uS/cm	6.97	-11.6	20.34
300	1305	↓	↓	↓	19.2	0.90	0.811 mS/cm uS/cm	6.91	-9.5	20.84
600	1306				19.3	0.68	0.811 mS/cm uS/cm	6.89	-7.5	22.51
900	1307				19.3	0.52	0.811 mS/cm uS/cm	6.88	-4.9	22.45
1200	1308				19.3	0.42	0.810 mS/cm uS/cm	6.88	-2.8	23.03
1500	1309				19.3	0.39	0.809 mS/cm uS/cm	6.88	-1.8	22.83
1800	1310				19.3	0.37	0.810 mS/cm uS/cm	6.88	-0.5	22.30
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-11-19

Start Time: 1304 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1310 Average Purge Rate (mL/min): 300 Date Calibrated: 7-11-19

SAMPLING DATA

Sample Date: 7-11-19 Sample Time: 1315 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 / 500 QA/QC Samples: MW1-ROX-071119-EB @1220

VOA Vials, No Headspace ☑ Initials: T J

COMMENTS:

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

Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B Howell T. Jones

DATE: 7/9/19 | WEATHER: 95° Sunny

MONITORING WELL ID: MW-2 | SAMPLE ID: MW2- ROX-070919

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 54.87 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 60.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.86 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.1 ppm
Depth to LNAPL/DNAPL (btoc): NF ft		
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 17.5 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 22.34 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1239	37.92	Clear	Slight	21.2	0.70	1.200 mS/cm uS/cm	6.68	-123.3	10.16
300	1240	37.93			21.2	0.36	1.199 mS/cm uS/cm	6.65	-123.3	11.82
600	1241	37.93			21.2	0.29	1.200 mS/cm uS/cm	6.64	-123.3	15.00
900	1242	37.89			20.8	0.23	1.198 mS/cm uS/cm	6.63	-124.2	19.34
1200	1243	37.89	↓	↓	20.9	0.19	1.196 mS/cm uS/cm	6.62	-125.2	22.04
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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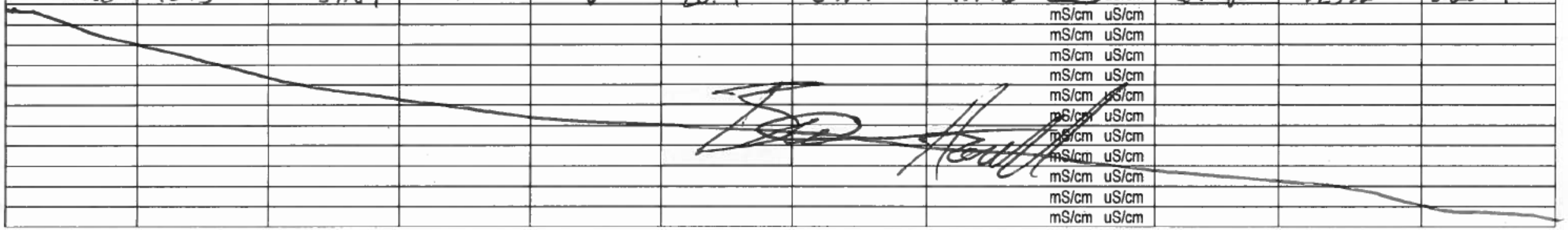

Start Time: 1239 | Elapsed Time (min): 4 | Water Quality Meter ID & SN: YSI ProDSS - 18K101877

Stop Time: 1243 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/9/19

SAMPLING DATA

Sample Date: 7/9/19 | Sample Time: 1245 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: TJ BH

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: I. Partin, J. Rogate

DATE: 7/10/19 WEATHER: Clear - 84°F

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-071019

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): 22.66' ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A 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): N/A ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 22.34' ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
~300	0856	22.71'	Clear	None	20.9	2.05	1.202 mS/cm uS/cm	6.53	122.9	12.69
~600	0857	↓	↓	Moderate	19.7	0.75	1.262 mS/cm uS/cm	6.65	26.3	11.79
~900	0858			↓	19.7	0.60	1.269 mS/cm uS/cm	6.69	0.0	11.84
~1200	0859				19.8	0.51	1.278 mS/cm uS/cm	6.70	-19.9	11.89
~1500	0900				19.9	0.39	1.279 mS/cm uS/cm	6.74	-55.9	12.99
~1800	0901				19.9	0.25	1.280 mS/cm uS/cm	6.75	-66.4	13.27
~2100	0902				19.9	0.37	1.281 mS/cm uS/cm	6.75	-70.6	13.49
~2400	0903	↓	↓	↓	20.0	0.34	1.280 mS/cm uS/cm	6.77	-80.3	13.93
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

Start Time: 0855 Elapsed Time (min): BAH ~~15min~~ 8 Water Quality Meter ID & SN: YSI ProDSS - 17D101950

Stop Time: BAH ~~0910~~ 0903 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 Sample Time: 0905 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

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 3Q19 PROJECT NUMBER: 60592794.1.03.003 FIELD PERSONNEL: I. PARTIN, B. HOWELL

DATE: 7/8/19 WEATHER: SUNNY 83°

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX-070819

INITIAL DATA

Well Diameter): 2 in
Total Well Depth (btoc): 55.39 ft
Depth to Water (btoc): 34.47 ft
Depth to LNAPL/DNAPL (btoc): NE ft
Depth to Top of Screen (btoc): 45.06 ft
Screen Length: 10 ft
Water Column Height (not including NAPL): 20.92 ft

IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 50.06 ft btoc
IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
IF SCREEN AND/OR WATER COLUMN HEIGHT <10 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: 12.4 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
					STABLE: (over 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	1112	34.50	CLEAR	SLIGHT	19.3	0.37	1.471 ~~mS/cm~~ uS/cm	6.74	-35.8	32.22
300	1113	↓			19.2	0.33	1.472 mS/cm uS/cm	6.73	-37.0	12.00
600	1114				19.2	0.27	1.473 mS/cm uS/cm	6.74	-41.0	18.43
900	1115				19.2	0.23	1.472 mS/cm uS/cm	6.75	-45.4	20.2
1200	1116	↓			19.3	0.22	1.472 mS/cm uS/cm	6.76	-50.6	25.19
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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7-8-19

Start Time: 1112 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 17D106950
Stop Time: 1116 Average Purge Rate (mL/min): 300 Date Calibrated: 7-8-19

SAMPLING DATA

Sample Date: 7/8/19 Sample Time: 1120 Lab Analysis: VOC, SVOC
Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: EB
VOA Vials, No Headspace ☑ Initials: IP

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: I. Partin, J. Ragsdale

DATE: 7/12/19 WEATHER: Clear - 83°F

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-ROX-071219

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): 22.37 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.2 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.97 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 5.5 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 21.93 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	1018	22.38	Clear	Moderate	19.2	2.36	1.167	mS/cm uS/cm	6.74	109.2	16.00
~300	1019	22.38		Strong	18.7	0.73	1.160	mS/cm uS/cm	6.72	87.6	18.52
~600	1020	22.39			18.6	0.43	1.164	mS/cm uS/cm	6.75	66.8	22.83
~900	1021				18.6	0.40	1.170	mS/cm uS/cm	6.76	51.2	21.21
~1200	1022				18.6	0.38	1.161	mS/cm uS/cm	6.77	42.9	18.64
~1500	1023	22.40			18.7	0.36	1.188	mS/cm uS/cm	6.77	34.7	13.95
~1800	1024				18.7	0.35	1.192	mS/cm uS/cm	6.78	26.1	12.10
~2100	1025				18.7	0.34	1.203	mS/cm uS/cm	6.78	12.2	11.02
~2400	1026				18.6	0.34	1.207	mS/cm uS/cm	6.78	0.1	10.69
~2700	1027				18.7	0.33	1.209	mS/cm uS/cm	6.78	-6.4	9.71
								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: 1018 Elapsed Time (min): ~9 min Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: 1027 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 1030 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: IP

COMMENTS:

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

Total Purge Volume: ~2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: J. Regatz, I. Partin

DATE: 7/11/19 | WEATHER: Clear - 79°F

MONITORING WELL ID: MW-6A | SAMPLE ID: MW6A-RDX-071119

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 36.85 ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 44.18 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 24.57 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 33.85 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): ~~19.61~~ ft 19.61'	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	0903	24.59	Cloudy	Moderate	21.8	0.59	0.811 mS/cm uS/cm	6.59	108.9	110.48
~300	0904	24.58			20.6	0.41	0.823 mS/cm uS/cm	6.57	-118.9	97.97
~600	0905				20.6	0.36	0.824 mS/cm uS/cm	6.59	-121.1	90.79
~900	0906				20.6	0.31	0.824 mS/cm uS/cm	6.60	-123.9	80.45
~1200	0907				20.7	0.25	0.825 mS/cm uS/cm	6.62	-124.7	67.42
~1500	0908				20.9	0.23	0.826 mS/cm uS/cm	6.62	-126.4	61.69
~1800	0909				20.9	0.20	0.826 mS/cm uS/cm	6.63	-127.8	60.12
~2100	0910				20.8	0.18	0.827 mS/cm uS/cm	6.64	-128.7	59.63
~2400	0911				20.7	0.21	0.827 mS/cm uS/cm	6.63	-125.1	54.50
~2700	0912				20.7	0.20	0.826 mS/cm uS/cm	6.61	-123.2	49.69
~3000	0913				20.6	0.19	0.827 mS/cm uS/cm	6.60	-120.4	47.33
~3300	0914				20.7	0.22	0.826 mS/cm uS/cm	6.56	-121.5	34.31
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0903 | Elapsed Time (min): ~11 min | Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 0914 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 7/11/19

SAMPLING DATA

Sample Date: 7/11/19 | Sample Time: 0915 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: IP

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 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: J. Ragatz, I. Partin

DATE: 7/11/19 WEATHER: Clear - 80°F

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B-ROX-071119

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~66.55' ~~69.05 NAVD88~~ ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 69.38 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 24.162 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ~~~69.05 NAVD88~~ ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): N/E ft		
Depth to Top of Screen (btoc): 64.05 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 44.76 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	0955	24.165	Clear	None	22.4	3.33	0.777 mS/cm uS/cm	7.23	-54.0	21.33
~300	0956			Slight	20.7	2.17	0.822 mS/cm uS/cm	7.00	-91.9	27.40
~600	0957				20.3	1.11	0.849 mS/cm uS/cm	6.90	-96.9	21.21
~900	0958				20.2	0.66	0.861 mS/cm uS/cm	6.84	-97.2	16.10
~1200	0959				20.2	0.42	0.869 mS/cm uS/cm	6.84	-99.1	14.29
~1500	1000				20.2	0.38	0.877 mS/cm uS/cm	6.84	-100.0	12.74
~1800	1001				20.3	0.31	0.881 mS/cm uS/cm	6.85	-102.4	11.69
~2100	1002				20.3	0.29	0.885 mS/cm uS/cm	6.86	-103.1	10.14
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0955 Elapsed Time (min): ~7 min Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1002 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/11/19

SAMPLING DATA

Sample Date: 7/11/19 Sample Time: 1005 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace (X) Initials: IP

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 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: J. Ragatz, I. Partin

DATE: 7/11/19 | WEATHER: Clear - 85°F

MONITORING WELL ID: MW-6C | SAMPLE ID: MW6C-ROX-071119

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): 24.42' ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 84.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): NA ft 65.86'	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	1125	24.42	Clear	Moderate	21.8	3.79	0.819 mS/cm uS/cm	7.17	-86.9	2.57
~300	1126	↓	↓	↓	20.2	0.93	0.839 mS/cm uS/cm	6.84	-135.2	2.11
~600	1127				20.2	0.69	0.839 mS/cm uS/cm	6.84	-149.7	1.97
~900	1128				20.3	0.50	0.838 mS/cm uS/cm	6.85	-154.2	1.89
~1200	1129				20.2	0.38	0.841 mS/cm uS/cm	6.89	-161.6	1.71
~1500	1130				20.1	0.34	0.840 mS/cm uS/cm	6.90	-163.4	1.69
~1800	1131				20.1	0.31	0.841 mS/cm uS/cm	6.92	-164.6	1.66
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 1125 | Elapsed Time (min): ~~H350~~ ~6min | Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1131 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 7/11/19

SAMPLING DATA

Sample Date: 7/11/19 | Sample Time: 1135 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: IP

COMMENTS:

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

Total Purge Volume: ~1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: I. Partin, J. Reagate

DATE: 7/11/19 WEATHER: Clear - 83°F

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-071119

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~107.22 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 110.05 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 24.24 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 85.81 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	1035	24.26	Clear	None	21.8	5.10	0.853 mS/cm uS/cm	7.20	-110.7	6.94
~300	1036	↓	↓	↓	20.9	2.22	0.898 mS/cm uS/cm	6.92	-120.4	11.69
~600	1037				20.3	1.01	0.918 mS/cm uS/cm	6.87	-122.6	15.27
~900	1038				20.3	0.64	0.925 mS/cm uS/cm	6.86	-122.9	11.97
~1200	1039				20.2	0.56	0.927 mS/cm uS/cm	6.85	-123.1	10.69
~1500	1040				20.3	0.45	0.929 mS/cm uS/cm	6.84	-123.8	9.19
~1800	1041				20.2	0.41	0.932 mS/cm uS/cm	6.86	-124.4	8.92
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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): ~6min Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1041 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/11/19

SAMPLING DATA

Sample Date: 7/11/19 Sample Time: 1045 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: IP

COMMENTS:

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

Total Purge Volume: ~1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana ~~2019~~ 3&9 GW PROJECT NUMBER: 60592794 - 1.03.~~002~~ 003 FIELD PERSONNEL: B. Howell I. Parth

DATE: 7/8/19 WEATHER: Sunny 90°F

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX-070819 / MW7-ROX-070819-DUP

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 47.92 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 52.92 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.58 ft		Ambient PID/FID Reading: 0.5 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 4144 ppm
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
Screen Length: 10 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc	
Water Column Height (not including NAPL): 16.34 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	1347	36.62	Cloudy	Moderate	20.5	0.38	1.352	mS/cm uS/cm	6.64	12.6	24.5
300	1348	↓	↓	↓	20.4	0.34	1.353	mS/cm uS/cm	6.64	-15.9	26.4
600	1349				20.3	0.31	1.355	mS/cm uS/cm	6.63	-20.6	28.7
900	1350				20.1	0.28	1.355	mS/cm uS/cm	6.62	-24.5	31.5
1200	1351				20.1	0.25	1.356	mS/cm uS/cm	6.62	-34.1	34.4
								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			

Start Time: 1347 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: 1351 Average Purge Rate (mL/min): 300 Date Calibrated: 7/8/19

SAMPLING DATA

Sample Date: 7/8/19 Sample Time: 1355 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: IP BH

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana ~~2019~~ 2019 GW PROJECT NUMBER: 60592794 - 1.03.~~002~~ 003 FIELD PERSONNEL: B-Howell I Parton

DATE: 7/8/19 WEATHER: Sunny 90°F

MONITORING WELL ID: MW-8 SAMPLE ID: ~~38.60~~ BAH MW8-ROX-070819

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	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 27.15 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF 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: 2646.0 ppm
Depth to Top of Screen (btoc): 33.60 ft		
Screen Length: 10 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
Water Column Height (not including NAPL): 16.45 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	1254	27.18	clear	strong	20.7	0.42	1.379 mS/cm uS/cm	6.77	-64.9	6.30
300	1255	↓	↓	↓	20.7	0.28	1.385 mS/cm uS/cm	6.78	-76.5	8.85
600	1256				20.6	0.26	1.386 mS/cm uS/cm	6.78	-78.7	10.32
900	1257				20.5	0.22	1.388 mS/cm uS/cm	6.78	-83.9	14.11
1200	1258				20.5	0.21	1.389 mS/cm uS/cm	6.78	-85.4	15.20
							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			

Start Time: 1254 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: 1258 Average Purge Rate (mL/min): 300 Date Calibrated: 7/8/19

SAMPLING DATA

Sample Date: 7/8/19 Sample Time: 1305 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: IP

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell, T. Jones

DATE: 7/10/19 WEATHER: Sunny

MONITORING WELL ID: MW-9 SAMPLE ID: MW9-Rox-071019 MW9-Rox-071019-Dup

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.64 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): 38.74 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 46.04 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 17.63 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1156	38.76	clear	slight	20.7	2.02	1.212 mS/cm uS/cm	6.74	-72.1	58.77
300	1157				21.9	0.73	1.298 mS/cm uS/cm	6.58	-75.8	49.81
600	1158				22.2	0.62	1.312 mS/cm uS/cm	6.56	-77.7	44.80
900	1159				22.5	0.59	1.324 mS/cm uS/cm	6.57	-79.1	38.41
1200	1200				23.2	0.56	1.320 mS/cm uS/cm	6.58	-78.8	36.40
1500	1201				23.6	0.54	1.334 mS/cm uS/cm	6.60	-80.5	35.24
							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			

TJ 7/10/19

Start Time: 1156 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 18K 101 872

Stop Time: 1201 Average Purge Rate (mL/min): 300 Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 Sample Time: 1205 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ

COMMENTS:

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

Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW **PROJECT NUMBER:** 60592794 - 1.03.003 **FIELD PERSONNEL:** I. Partin, J. Ragatz

DATE: 7/12/19 **WEATHER:** Clear - 80°F

MONITORING WELL ID: MW-10 **SAMPLE ID:** MW10-ROX-071219

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): 39.33' ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NF 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): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 15.43 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	0926	39.36	Cloudy	Slight	19.6	1.12	1.455	mS/cm uS/cm	6.98	30.7	120.64
~300	0927				19.2	1.06	1.441	mS/cm uS/cm	6.99	0.2	111.1
~600	0928				19.0	1.01	1.430	mS/cm uS/cm	7.02	-11.5	104.24
~900	0929				18.6	0.69	1.426	mS/cm uS/cm	7.01	-26.9	90.15
~1200	0930				18.7	0.61	1.420	mS/cm uS/cm	7.00	-41.6	82.31
~1500	0931				18.8	0.38	1.418	mS/cm uS/cm	7.01	-55.0	70.05
~1800	0932				18.8	0.33	1.416	mS/cm uS/cm	7.00	-62.6	57.18
~2100	0933		Hazy		18.8	0.30	1.414	mS/cm uS/cm	7.01	-71.6	45.13
~2400	0934				18.9	0.29	1.414	mS/cm uS/cm	7.02	-76.9	39.21
~2700	0935				18.9	0.28	1.414	mS/cm uS/cm	7.03	-81.2	34.95
~3000	0936				18.9	0.28	1.413	mS/cm uS/cm	7.02	-84.4	31.31
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0926 **Elapsed Time (min):** ~10min **Water Quality Meter ID & SN:** YSI ProDSS - 17D101950

Stop Time: 0936 **Average Purge Rate (mL/min):** ~300 **Date Calibrated:** 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 **Sample Time:** 0940 **Lab Analysis:** VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: ~3000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: J. Rogatz, I. Martin

DATE: 7/9/19 | WEATHER: Clear - 87°F

MONITORING WELL ID: MW-11 | SAMPLE ID: MW11-ROX-070919

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): 35.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 16.04 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

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))
~300	1159	35.98	Clear	None	19.8	2.15	1.350 mS/cm uS/cm	6.86	144.5	9.97
~600	1200	35.96			19.4	0.63	1.340 mS/cm uS/cm	6.80	87.0	8.17
~900	1201				19.6	0.50	1.337 mS/cm uS/cm	6.80	62.4	7.48
~1200	1202				19.7	0.47	1.335 mS/cm uS/cm	6.80	46.3	7.04
~1500	1203				19.9	0.43	1.332 mS/cm uS/cm	6.80	30.9	6.79
~1800	1204				20.1	0.40	1.330 mS/cm uS/cm	6.80	19.7	6.49
~2100	1205				20.2	0.37	1.331 mS/cm uS/cm	6.80	11.3	6.54
~2400	1206				20.3	0.34	1.330 mS/cm uS/cm	6.80	6.9	6.46
							mS/cm uS/cm			
							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: BAH ~~1155~~ 1158 | Elapsed Time (min): BAH ~20mins. 8 | Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: BAH ~~1215~~ 1206 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 7/9/19

SAMPLING DATA

Sample Date: 7/9/19 | Sample Time: 1210 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: JR

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 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: J. Rougeatz, J. Partin

DATE: 7/10/19 WEATHER: Clear - 96°F

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX-071019

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~46.92 ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 52.25 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 35.87 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.1 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 16.38 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
~300	1207	35.97	Clear	None	24.3	4.64	0.893 mS/cm uS/cm	6.94	234.6	18.61
~600	1203				21.2	2.22	0.882 mS/cm uS/cm	6.89	234.6	16.91
~900	1204				20.6	0.92	0.875 mS/cm uS/cm	6.86	234.7	13.50
~1200	1205				20.4	0.62	0.873 mS/cm uS/cm	6.87	234.6	13.60
~1500	1206				20.5	0.50	0.873 mS/cm uS/cm	6.87	234.5	14.80
~1800	1207				20.5	0.41	0.872 mS/cm uS/cm	6.87	234.4	17.44
~2100	1208				20.4	0.36	0.872 mS/cm uS/cm	6.86	234.2	16.92
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: BAH ~~1200~~ 1201 Elapsed Time (min): BAH ~~~15min~~ 7 Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: BAH ~~1215~~ 1208 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 Sample Time: 1210 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JR

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 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/9/19 WEATHER: 85° F Sunny

MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-070919

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): 21.59 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 24.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 15.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 13.46 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

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	1014	21.62	Clear	Slight	22.0	0.18	0.996 mS/cm uS/cm	~~4.36~~ 6.36	-121.5	18.5
300	1015	21.62	↓	↓	22.4	0.17	0.998 mS/cm uS/cm	6.36	-119.9	20.75
600	1016	21.61			22.5	0.16	0.998 mS/cm uS/cm	6.36	-120.3	21.33
900	1017	21.60			22.4	0.16	0.999 mS/cm uS/cm	6.36	-120.6	21.79
1200	1018	21.60	↓	↓	22.4	0.14	0.997 mS/cm uS/cm	6.37	-121.4	21.00
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1014 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1018 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/19

SAMPLING DATA

Sample Date: 7/9/19 Sample Time: 1020 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: BH TJ

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: T. Jones B. Howell

DATE: 7/10/19 WEATHER: Sunny 85°F

MONITORING WELL ID: MW-14 SAMPLE ID: MW14 - ROX - 071019

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): 26.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.1 ppm	
Depth to LNAPL/DNAPL (btoc): — 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: 76.3 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 17.05 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0822	26.96	Clear	Moderate	20.8	1.90	0.866 mS/cm uS/cm	6.80	-93.5	7.96
300	0823	↓	↓	↓	29.7	0.87	0.911 mS/cm uS/cm	6.75	-104.6	12.10
600	0824				20.8	0.59	0.914 mS/cm uS/cm	6.75	-105.6	12.61
900	0825				20.8	0.45	0.921 mS/cm uS/cm	6.75	-109.9	14.35
1200	0826				20.8	0.39	0.926 mS/cm uS/cm	6.76	-114.4	16.80
1500	0827	26.96	↓	↓	20.8	0.36	0.927 mS/cm uS/cm	6.76	-115.8	17.52
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0822 Elapsed Time (min): BAH ~~0830~~ 5 Water Quality Meter ID & SN: YSI ProDSS - IBK101 872

Stop Time: 0827 Average Purge Rate (mL/min): 300 Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 Sample Time: 0830 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ BH

COMMENTS:

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

Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/9/19 | WEATHER: 90°F Sunny

MONITORING WELL ID: MW-16 | SAMPLE ID: MW16-Rox-070919 | MW16-Rox-070919-MS, MW16-Rox-070919-MSD

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): 37.55 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.65 ft btoc	Ambient PID/FID Reading: 0. ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 37.50 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.2 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	1138	37.57	clear	slight	20.8	0.95	1.227 mS/cm uS/cm	6.58	-5.7	42.71
300	1139	↓	↓	↓	20.5	0.66	1.321 mS/cm uS/cm	6.55	-6.4	38.21
600	1140				20.7	0.50	1.316 mS/cm uS/cm	6.53	-7.4	32.10
900	1141				20.7	0.42	1.315 mS/cm uS/cm	6.52	-10.3	29.20
1200	1142				20.6	0.27	1.314 mS/cm uS/cm	6.53	-14.2	25.80
~~1500~~ TJ 7/9/19							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
				7/9/19 TJ			mS/cm uS/cm			
							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: 1138 | Elapsed Time (min): 4 | Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1142 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/9/19

SAMPLING DATA

Sample Date: 7/9/19 | Sample Time: 1145 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ, BH

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: D. Partin, J. Ravgutz

DATE: 7/12/19 WEATHER: Clear - 87°F

MONITORING WELL ID: MW-22 SAMPLE ID: N/A

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: N/A 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): N/A ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: N/A ppm
Depth to LNAPL/DNAPL (btoc): N/A 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): N/A ft btoc	Wellbore PID/FID Reading: N/A ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): N/A ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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)

Well Inaccessible Due to RV.

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: N/A

COMMENTS:

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

Total Purge Volume: N/A mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: T. Partin, J. Rongaetz

DATE: 7/10/19 WEATHER: Clear - 86°F

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-D71019

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~34.02' ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 39.27 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 23.01 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 16.26 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
~300	0941	23.04	Clear	Slight	20.4	1.00	0.983 mS/cm uS/cm	6.71	39.1	10.69
~600	0942	↓	↓	↓	20.5	0.39	0.981 mS/cm uS/cm	6.68	-33.7	9.90
~900	0943				21.0	0.36	0.980 mS/cm uS/cm	6.67	-46.5	10.45
~1200	0944				20.9	0.34	0.982 mS/cm uS/cm	6.66	-50.2	11.92
~1500	0945				21.0	0.33	0.983 mS/cm uS/cm	6.66	-54.0	12.45
~1800	0946				21.0	0.31	0.982 mS/cm uS/cm	6.66	-57.2	12.69
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

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

Start Time: 0940 Elapsed Time (min): ~~0950~~ ~15 min BAH 10

Stop Time: ~~0955~~ 0946 Average Purge Rate (mL/min): ~300

Water Quality Meter ID & SN: YSI ProDSS - ~~17D100950~~ 17D101950

Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 Sample Time: 0950 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JR

COMMENTS:

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

Total Purge Volume: ~1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: I. PARTIN J. RAGATZ

DATE: 7/9/19 | WEATHER: Clear - 86°F

MONITORING WELL ID: MW-24 | SAMPLE ID: MW24-ROX-070919

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): 37.04 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: NA ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 39.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.82 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)
~300	1101	37.06'	Cloudy	None	21.5	3.90	1.255 mS/cm uS/cm	7.26	373.3	118.69
~600	1102				21.0	3.12	1.274 mS/cm uS/cm	7.10	318.4	102.12
~900	1103				20.4	2.69	1.320 mS/cm uS/cm	7.02	314.4	97.84
~1200	1104				19.2	1.72	1.215 mS/cm uS/cm	6.93	316.9	92.12
~1500	1105				19.2	0.48	1.228 mS/cm uS/cm	6.90	310.4	76.41
~1800	1106				19.1	0.43	1.229 mS/cm uS/cm	6.89	308.3	60.23
~2100	1107				19.1	0.40	1.238 mS/cm uS/cm	6.89	306.2	49.70
~2400	1108	37.06'	Clear		19.1	0.40	1.246 mS/cm uS/cm	6.88	304.7	38.21
~2700	1109				19.1	0.36	1.253 mS/cm uS/cm	6.86	301.7	26.79
~3000	1110				19.1	0.33	1.266 mS/cm uS/cm	6.84	298.7	20.12
~3300	1111				19.1	0.32	1.278 mS/cm uS/cm	6.83	296.1	17.12
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

SMF BAH

Start Time: ~~1100~~ 1101

Stop Time: ~~1120~~ 1111

Elapsed Time (min): ~~1120~~ ~~20 min~~ 11 min

Average Purge Rate (mL/min): 300

Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Date Calibrated: 07-09-19

SAMPLING DATA

Sample Date: 7/9/19 | Sample Time: 1115 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: JR

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 ~~2019~~ 3919 GW PROJECT NUMBER: 60592794 - 1.03~~.002~~ 003 FIELD PERSONNEL: B. Howell J. Partin

DATE: 7/8/19 WEATHER: Sunny 90°F

MONITORING WELL ID: MW-25 SAMPLE ID: MW25 - ROX - 070819

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): 31.52 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: ~~24.9~~ BH 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF 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: 24.9 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.32 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	1152	31.516	Slight	Cloudy	20.9	0.45	1.060	mS/cm uS/cm	6.88	-49.9	17.86
300	1153	31.56	↓	↓	21.0	0.40	1.059	mS/cm uS/cm	6.87	-56.2	16.61
600	1154				21.0	0.35	1.059	mS/cm uS/cm	6.87	-66.4	15.46
900	1155				20.9	0.31	1.058	mS/cm uS/cm	6.87	-69.9	16.15
1200	1156				20.8	0.30	1.059	mS/cm uS/cm	6.87	-73.4	16.74
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 1152 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: 1156 Average Purge Rate (mL/min): 300 Date Calibrated: 7/8/19

SAMPLING DATA

Sample Date: 7/8/19 Sample Time: 1200 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: JP BH

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: J. Ragatz, I. Partin

DATE: 7/10/19 | WEATHER: Clear - 86°F

MONITORING WELL ID: MW-26 | SAMPLE ID: MW26-ROX-071019

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
Total Well Depth (btoc): 48.40 ft	
Depth to Water (btoc): 34.54' ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 13.86 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
	STABLE: (over 3 readings)				Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
~300	1026	34.59	Clear	Slight	22.0	2.89	1.048 mS/cm uS/cm	6.99	215.3	10.95
~600	1027				21.2	1.12	1.047 mS/cm uS/cm	6.92	212.6	11.88
~900	1028				20.1	0.50	1.046 mS/cm uS/cm	6.89	210.4	12.95
~1200	1029				19.9	0.40	1.045 mS/cm uS/cm	6.86	209.2	13.50
~1500	1030				19.7	0.36	1.045 mS/cm uS/cm	6.85	208.1	12.66
~1800	1031				19.8	0.31	1.045 mS/cm uS/cm	6.85	207.0	10.21
~2100	1032				19.7	0.30	1.045 mS/cm uS/cm	6.84	206.7	9.69
~2400	1033				19.8	0.29	1.044 mS/cm uS/cm	6.84	206.0	9.24
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 1025
Stop Time: BAH ~~1050~~ 1033
Elapsed Time (min): BAH ~~25 min~~ 8
Average Purge Rate (mL/min): ~300
Water Quality Meter ID & SN: YSI ProDSS -17D106950
Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19
Sample Time: 1035
Lab Analysis: VOC, SVOC, PAH
Sample Method: Stainless Steel Submersible Pump / Low Flow
Sample Flow Rate (mL/min): ~300
QA/QC Samples: MW26-ROX-071019 - MS
MW26-ROX-071019 - MSD
VOA Vials, No Headspace ☒ Initials: JR

COMMENTS:

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

Total Purge Volume: ~7480 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: J. Ragsdale, T. Partin

DATE: 7/9/19 WEATHER: Clear - 88°F

MONITORING WELL ID: MW-27 SAMPLE ID: MW27-ROX-070919

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): 37.65' ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 39.79 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 12.39 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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)
~300	1247	37.82	Cloudy	None	20.1	4.78	0.899 mS/cm uS/cm	7.02	292.2	76.20
~600	1248	37.84	↓		19.3	3.72	0.893 mS/cm uS/cm	6.97	286.3	35.98
~900	1249	37.83	Hazy		19.0	3.56	0.890 mS/cm uS/cm	6.97	287.4	25.34
~1200	1250		↓		19.1	3.50	0.891 mS/cm uS/cm	6.97	287.9	15.26
~1500	1251		Clear		19.0	3.45	0.890 mS/cm uS/cm	6.97	288.2	13.55
~1800	1252				19.2	3.40	0.891 mS/cm uS/cm	6.96	288.8	9.21
~2100	1253				19.1	3.38	0.890 mS/cm uS/cm	6.95	288.9	6.94
~2400	1254				19.1	3.36	0.891 mS/cm uS/cm	6.95	289.0	5.86
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: BAH ~~1245~~ 1246 Elapsed Time (min): BAH ~~15 min~~ 8 min Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: BAH ~~1300~~ 1254 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/9/19

SAMPLING DATA

Sample Date: 7/9/19 Sample Time: 1255 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: JR

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 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B. Howell T. Joner

DATE: 7-10-19 | WEATHER: Sunny 109°F

MONITORING WELL ID: MW-28 | SAMPLE ID: ~~MW-28-Rox-071019~~ D 7/10/19 MW28-Rox-071019

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 43.86 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.14 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.5 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 6.72 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	37.23	clear	slight	22.7	1.01	1.473 mS/cm uS/cm	6.65	11.8	67.00
300	1046	↓	↓	↓	22.6	0.63	1.476 mS/cm uS/cm	6.56	14.8	45.05
600	1047				22.8	0.53	1.477 mS/cm uS/cm	6.55	15.7	37.18
900	1048				22.4	0.44	1.488 mS/cm uS/cm	6.56	16.0	32.47
1200	1049				22.5	0.39	1.486 mS/cm uS/cm	6.56	15.8	27.04
1500	1050				23.0	0.37	1.475 mS/cm uS/cm	6.57	15.4	22.76
							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			

D 7/10/19

Start Time: 1045 | Elapsed Time (min): 5 | Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1050 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 | Sample Time: 1055 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TS

COMMENTS:

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

Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: I. PARTIN J. RAGATZ

DATE: 7-9-19 WEATHER: Clear ~82°F

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-070919

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): 35.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 38.00 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ~43.00 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 27.40 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A 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)
~300	1017	35.62	Clear	None	21.2	3.36	1.156 mS/cm uS/cm	6.39	274.7	4.39
~600	1018	↓	↓	↓	19.9	1.60	1.163 mS/cm uS/cm	6.55	269.6	3.77
~900	1019				20.1	1.32	1.175 mS/cm uS/cm	6.62	268.0	3.46
~1200	1020				20.0	1.22	1.182 mS/cm uS/cm	6.64	267.0	3.54
~1500	1021				20.1	1.12	1.187 mS/cm uS/cm	6.67	264.9	3.40
~1800	1022				20.2	1.06	1.188 mS/cm uS/cm	6.69	262.7	3.60
							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: ~~1015~~ ~~1017~~ 1016 Elapsed Time (min): ~~~15 min~~ ~~5~~ 6 Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: ~~1030~~ 1022 Average Purge Rate (mL/min): 300 Date Calibrated: 07-09-19

SAMPLING DATA

Sample Date: 7/9/19 Sample Time: 1025 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: P54-ROX-070919-EB @ 0945

VOA Vials, No Headspace ☑ Initials: JR

COMMENTS:

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

Total Purge Volume: ~1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW **PROJECT NUMBER:** 60592794 - 1.03.003 **FIELD PERSONNEL:** T. Jones

DATE: 7-11-19 **WEATHER:** Sunny 95°F

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: 42 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): ~~40.37~~ 40.39 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
Depth to LNAPL/DNAPL (btoc): ~~40.25~~ 37.39 ft		Ambient PID/FID Reading: 0.4 ppm
Depth to Top of Screen (btoc): 40.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 228.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.43 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

TS 7-11-19

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

Stop Time: NA **Average Purge Rate (mL/min):** NA **Date Calibrated:** 7-11-19

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/QC Samples:** NA

VOA Vials, No Headspace ☐ Initials: NA

COMMENTS:

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

Total Purge Volume: NA mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/12/19 WEATHER: Sunny 90° F

MONITORING WELL ID: P56 SAMPLE ID: P56-ROX-071219

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 65.82 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.50 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 40.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 45.82 ft btoc	Wellbore PID/FID Reading: 118.9 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 25.32 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	1220	40.56	DK Gray	Slight	25.3	0.25	1.880 mS/cm uS/cm	6.92	-170.4	105.00
1500 ~~300~~	1225	40.57			25.5	0.09	1.862 mS/cm uS/cm	6.91	-180.2	86.66
3000 ~~600~~	1230	40.58			25.7	0.07	1.820 mS/cm uS/cm	6.91	-187.9	93.39
9000 ~~900~~	1250	40.59			23.6	0.07	1.636 mS/cm uS/cm	6.87	-171.7	247.8
12000 ~~1200~~	1300	40.60			26.4	0.04	1.553 mS/cm uS/cm	6.93	-183.0	242.2
13500	1305	40.59			26.2	0.04	1.541 mS/cm uS/cm	6.92	-184.1	117.4
13800	1306	40.58			26.0	0.04	1.543 mS/cm uS/cm	6.92	-185.5	102.7
14100	1307	40.57			25.8	0.04	1.544 mS/cm uS/cm	6.92	-185.9	89.1
14400	1308	40.57			25.8	0.06	1.540 mS/cm uS/cm	6.89	-183.1	62.1
							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: 1220. Elapsed Time (min): 48 Water Quality Meter ID & SN: YSI ProDSS -- 18K101872

Stop Time: 1308 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 1315 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH TJ

COMMENTS:

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

Turbidity high/water very dark with visible particles in water. Taking readings every 5 mins until turbidity drops.

Total Purge Volume: 14400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/15/19 | WEATHER: Cloudy 75° F

MONITORING WELL ID: P-57 | SAMPLE ID: P57-ROX-071519

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): 40.82 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.1 ppm
Depth to LNAPL/DNAPL (btoc): NF ft		
Depth to Top of Screen (btoc): 44.19 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 60.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.37 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	

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	0948	41.37	clear	slight	22.0	1.06	1.089 mS/cm uS/cm	6.71	-144.0	6.82
300	0949	41.44	↓	↓	21.8	0.64	1.085 mS/cm uS/cm	6.68	-145.8	6.43
600	0950	41.52			21.9	0.44	1.083 mS/cm uS/cm	6.65	-146.3	6.34
900	0951	41.55			21.9	0.34	1.083 mS/cm uS/cm	6.64	-146.3	6.28
1200	0952	41.57			21.9	0.30	1.083 mS/cm uS/cm	6.64	-146.4	6.70
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 0948 | Elapsed Time (min): BAH ~~0955~~ 4 | Water Quality Meter ID & SN: YSI ProDSS -- 18K101872

Stop Time: 0952 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/15/19

SAMPLING DATA

Sample Date: 7/15/19 | Sample Time: BAH ~~1200~~ 0955 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BA TJ

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/15/19 WEATHER: RAINY / 75° F

MONITORING WELL ID: P-58 SAMPLE ID: P58-ROX-071519

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): 38.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.1 ppm
Depth to LNAPL/DNAPL (btoc): NF ft		
Depth to Top of Screen (btoc): 40.21 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 45.21 ft btoc	Wellbore PID/FID Reading: 293.7 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 26.78 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	38.56	Cloudy	Moderate	22.3	1.40	2.986 mS/cm uS/cm	6.62	-87.9	32.88
300	1156				22.4	1.02	2.999 mS/cm uS/cm	6.61	-95.1	31.57
600	1157				22.5	0.64	3.060 mS/cm uS/cm	6.62	-108.0	30.09
900	1158				22.5	0.42	3.076 mS/cm uS/cm	6.63	-114.1	29.76
1200	1159				22.7	0.33	3.079 mS/cm uS/cm	6.63	-117.7	26.01
1500	1200				22.8	0.26	3.081 mS/cm uS/cm	6.64	-120.8	27.50
1800	1201				22.9	0.23	3.083 mS/cm uS/cm	6.65	-122.0	26.95
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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): ~~BALL 1205~~ 6 Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1201 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/19

SAMPLING DATA

Sample Date: 7/15/19 Sample Time: 1205 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH TJ

COMMENTS:

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

Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/15/19 WEATHER: RAINY 75° F

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-071519

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): 41.54 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.1 ppm
Depth to LNAPL/DNAPL (btoc): 41.53 ft		
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 405.7 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 31.37 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	

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)
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: — Elapsed Time (min): — Water Quality Meter ID & SN: YSI ProDSS -- 18K101872

Stop Time: — Average Purge Rate (mL/min): — Date Calibrated: 7/15/19

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL LNAPL, no sample collected

Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: T. Jones B. Howell

DATE: 7/10/19 WEATHER: 90° F Sunny

MONITORING WELL ID: P-66 SAMPLE ID: P66-ROX-071019

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 59.72 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 30.00 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.1 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 39.72 ft btoc	Wellbore PID/FID Reading: 57.6 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 29.72 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0901	30.04	Clear	Moderate	23.2	1.11	1.401 mS/cm uS/cm	6.62	-132.6	5.31
300	0902	↓	↓	↓	22.8	0.69	1.414 mS/cm uS/cm	6.59	-135.1	6.06
600	0903				22.9	0.47	1.423 mS/cm uS/cm	6.55	-135.6	6.97
900	0904				23.0	0.36	1.437 mS/cm uS/cm	6.52	-135.5	6.99
1200	0905				22.9	0.29	1.441 mS/cm uS/cm	6.50	-135.7	6.24
1500	0906				22.8	0.25	1.446 mS/cm uS/cm	6.49	-135.9	6.09
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0901 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 0906 Average Purge Rate (mL/min): 300 Date Calibrated: 7/10/19

SAMPLING DATA

Sample Date: 7/10/19 Sample Time: 0910 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BH TJ

COMMENTS:

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

Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: T. Joner

DATE: 7-11-19 WEATHER: SUNNY 95°F

MONITORING WELL ID: P-68 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): 68.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.31 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.5 ppm
Depth to LNAPL/DNAPL (btoc): 40.25 ft		
Depth to Top of Screen (btoc): 43.76 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 176.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 28.57 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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			
					D 7-11-19		mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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 – NA

Stop Time: NA Average Purge Rate (mL/min): NA Date Calibrated: 7-11-19

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/QC Samples: NA

VOA Vials, No Headspace ☐ Initials: NA

COMMENTS:

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

Total Purge Volume: NA mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/12/19 WEATHER: Sunny 78°F

MONITORING WELL ID: P-74 SAMPLE ID: P74 - ROX - 071219 P74-ROX-071219-EB

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): 68.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.95 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 48.83 ft btoc	Wellbore PID/FID Reading: 0.8 ppm
Depth to Top of Screen (btoc): 43.83 ft		
Screen Length: 25 ft		
Water Column Height (not including NAPL): 30.88 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0913	37.96	Clear	Slight	21.9	0.57	0.221 mS/cm uS/cm	6.74	-72.2	11.66
300	0914	↓	↓	↓	22.0	0.50	0.221 mS/cm uS/cm	6.73	-77.7	11.19
600	0915				22.1	0.41	0.221 mS/cm uS/cm	6.73	-91.9	11.02
900	0916				22.0	0.35	0.222 mS/cm uS/cm	6.74	-99.9	10.47
1200	0917				22.3	0.31	0.221 mS/cm uS/cm	6.74	-106.9	9.88
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0913 Elapsed Time (min): ~~0920~~ BAH 4 Water Quality Meter ID & SN: YSI ProDSS -- 18K101872

Stop Time: 0917 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 0920 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: EB @ 0855

VOA Vials, No Headspace ☒ Initials: TJ BH

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B. Howell T. Sones

DATE: 7/15/19 | WEATHER: Cloudy / RAINY 70°F

MONITORING WELL ID: P-93A | SAMPLE ID: P93A-Rox-071519

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): 38.92 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
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): 14.15 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: 0.5 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1100	39.02	Clear	Slight	22.2	1.54	1.044 mS/cm uS/cm	6.72	-101.5	7.72
300	1101	↓	↓	↓	22.8	0.65	1.062 mS/cm uS/cm	6.63	-107.0	6.37
600	1102				22.8	0.60	1.067 mS/cm uS/cm	6.62	-107.1	6.29
900	1103				23.0	0.52	1.077 mS/cm uS/cm	6.60	-107.5	5.80
1200	1104				22.9	0.41	1.083 mS/cm uS/cm	6.61	-109.8	5.38
1500	1105	39.02			22.9	0.38	1.080 mS/cm uS/cm	6.63	-111.3	5.58
1800	1106	↓	↓	↓	22.9	0.36	1.079 mS/cm uS/cm	6.64	-112.7	5.63
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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): 6 | Water Quality Meter ID & SN: YSI ProDSS -- 18K101 872

Stop Time: 1106 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/15/19

SAMPLING DATA

Sample Date: 7/15/19 | Sample Time: 1110 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BHTS

COMMENTS:

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

Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/12/19 | WEATHER: Sunny 90°F

MONITORING WELL ID: P-93B | SAMPLE ID: P93B-ROX-071219 P93B-ROX-071219-D

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 76.78 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.35 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): NE ft		
Depth to Top of Screen (btoc): 74.78 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 36.43 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc	

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	1111		Clear	Slight	21.6	2.02	1.204 mS/cm uS/cm	6.60	-122.2	14.7
300	1113				21.3	1.80	1.161 mS/cm uS/cm	6.59	-119.3	36.2
600	1113				20.2	1.90	1.117 mS/cm uS/cm	6.58	-117.2	27.1
900	1114				20.4	1.12	1.109 mS/cm uS/cm	6.57	-116.0	10.8
1200	1115				20.8	1.06	1.104 mS/cm uS/cm	6.57	-117.7	6.78
1500	1116				21.1	1.06	1.102 mS/cm uS/cm	6.54	-116.6	4.69
1800	1117				21.2	1.08	1.101 mS/cm uS/cm	6.57	-115.3	4.07
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1111 | Elapsed Time (min): 6 | Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 1117 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 | Sample Time: 1120 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Bladder Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QCSamples: Duplicate @ 1120

VOA Vials, No Headspace ☑ Initials: B/H TJ

COMMENTS:

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

MP 10 cycle: 7.5/7.5 @ ~~40~~ psi B/H 30 psi

Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/12/19 WEATHER: Sunny 85°F

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-071219

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 97.88 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 92.88 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): 57.7 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: 95.88 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	1001	40.22	Clear	Slight	20.5	1.40	1.141 mS/cm uS/cm	6.81	-102.9	25.81
300	1002	↓	↓	↓	21.3	0.80	1.140 mS/cm uS/cm	6.78	-106.8	28.76
600	1003				21.7	0.61	1.153 mS/cm uS/cm	6.76	-108.6	34.26
900	1004				21.7	0.46	1.165 mS/cm uS/cm	6.76	-108.5	41.26
1200	1005				21.6	0.39	1.169 mS/cm uS/cm	6.77	-108.1	46.40
1500	1006				21.6	0.36	1.172 mS/cm uS/cm	6.77	-108.2	46.19
1800	1007				21.7	0.34	1.175 mS/cm uS/cm	6.77	-108.0	48.20
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1001 Elapsed Time (min): BH ~~1010~~ 6 Water Quality Meter ID & SN: YSI ProDSS -- 18K101872

Stop Time: 1007 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 1010 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ BH

COMMENTS:

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

Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: T. Jones B. Howell

DATE: 7/12/19 WEATHER: Sunny 85°F

MONITORING WELL ID: P-93D SAMPLE ID: P93D-ROX-071219

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 128.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.53 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 (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 87.47 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	

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	1047	40.54	clear	slight	21.6	2.17	1.404 mS/cm uS/cm	7.06	-202	2.34
300	1048				21.0	1.64	1.395 mS/cm uS/cm	6.93	-201.9	2.72
600	1049				20.3	1.21	1.368 mS/cm uS/cm	6.87	-200.1	3.05
900	1050				20.0	0.98	1.354 mS/cm uS/cm	6.76	-185.2	2.95
1200	1051				19.8	0.84	1.351 mS/cm uS/cm	6.74	-177.1	3.46
1500	1052				19.7	0.80	1.349 mS/cm uS/cm	6.73	-170.8	4.14
~~1800~~	~~1053~~ BAH						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: 1047 Elapsed Time (min): BAH ~~1055~~ 5 Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: ~~1051~~ 1052 SMF Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 1055 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: BH TJ

COMMENTS:

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

7.5/7.5 cycle on MP10 @ 70 psi

Total Purge Volume: ~~1500~~ BAH 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW | PROJECT NUMBER: 60592794 - 1.03.003 | FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/9/19 | WEATHER: Sunny 80°F

MONITORING WELL ID: P-114R | SAMPLE ID: P114R-ROX-070919 P114R-ROX-070919-EB

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): 19.48 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: 19.8 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.83 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0906	19.58	Cloudy	Slight	20.7	4.4	0.976 mS/cm uS/cm	6.37	-135.9	301.17
1500 ~~3000~~	0911	19.58			20.7	1.0	0.951 mS/cm uS/cm	6.38	-142.2	161.00
3000 ~~6000~~	0916	19.58			20.7	0.9	0.961 mS/cm uS/cm	6.37	-141.3	113.9
4500 ~~9000~~	0921	19.58			20.7	0.6	1.009 mS/cm uS/cm	6.36	-140.0	72.15
6000 ~~12000~~	0926	19.58			20.7	0.4	1.021 mS/cm uS/cm	6.36	-139.9	73.89
7500	0931	19.58			20.6	0.2	1.055 mS/cm uS/cm	6.36	-137.2	64.91
7800	0932	19.58			20.6	0.2	1.056 mS/cm uS/cm	6.36	-137.3	64.14
8100	0933	19.58			20.6	0.1	1.054 mS/cm uS/cm	6.36	-136.2	65.60
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0906 | Elapsed Time (min): 27 | Water Quality Meter ID & SN: YSI ProDSS - 18K101877

Stop Time: 0933 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/9/19

SAMPLING DATA

Sample Date: 7/9/19 | Sample Time: 0935 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QC Samples: EB @ 0845

VOA Vials, No Headspace ☑ Initials: TJ BH

COMMENTS:

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

Begin purging @ 0906 but turbidity >300 NTU (initial water lvl = 19.58) so BH + TJ ~~went to start recording data~~ take readings but over longer intervals. Total Purge Volume: 8100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW **PROJECT NUMBER:** 60592794 - 1.03.003 **FIELD PERSONNEL:** T. PARTIN, T. JONES

DATE: 7-11-19 **WEATHER:** CLOUDY 80°

MONITORING WELL ID: ROST-3-MW **SAMPLE ID:** ROST3MW-ROX-071119

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): 36.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
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: 161.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.68 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1350	36.45	CLEAR	SLIGHT	18.8	0.93	1.254 mS/cm uS/cm	6.71	-117.8	5.45
300	1351	36.44	↓	↓	19.0	0.63	1.257 mS/cm uS/cm	6.70	-118.7	5.32
600	1352	↓			19.2	0.50	1.258 mS/cm uS/cm	6.70	-120.9	5.95
900	1353				19.3	0.43	1.260 mS/cm uS/cm	6.70	-121.9	6.44
1200	1354				19.3	0.40	1.261 mS/cm uS/cm	6.70	-122.3	6.69
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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7-11-19

Start Time: 1350 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS - 18K101872

Stop Time: 1354 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 7-11-19

SAMPLING DATA

Sample Date: 7-11-19 **Sample Time:** 1400 **Lab Analysis:** VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow **Sample Flow Rate (mL/min):** 300 / 500 **QA/QCSamples:** NA

VOA Vials, No Headspace ☑ **Initials:** TJ

COMMENTS:

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

Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: J. Ragatz, T. Partin

DATE: 7/12/19 WEATHER: Clear - 88°F

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-071219

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: N/A 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): 37.64 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~41.42 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): N/A ft btoc	Wellbore PID/FID Reading: 0.1 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 7.56 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	1201	37.72	Clear	Moderate	20.4	2.25	1.414 mS/cm uS/cm	7.26	-24.8	17.13
~300	1202	↓	↓	↓	20.2	1.01	1.454 mS/cm uS/cm	7.20	-69.0	16.69
~600	1203				20.0	0.54	1.445 mS/cm uS/cm	7.17	-102.4	15.33
~900	1204				19.9	0.41	1.444 mS/cm uS/cm	7.17	-121.1	15.60
~1200	1205				19.8	0.37	1.443 mS/cm uS/cm	7.17	-128.0	16.02
~1500	1206				19.9	0.30	1.441 mS/cm uS/cm	7.16	-155.1	13.55
~1800	1207				19.7	0.28	1.441 mS/cm uS/cm	7.17	-162.1	13.48
~2100	1208				19.5	0.25	1.439 mS/cm uS/cm	7.17	-169.4	12.94
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1201 Elapsed Time (min): ~7min Water Quality Meter ID & SN: YSI ProDSS - 17D101950

Stop Time: 1208 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 1210 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: EP

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 3Q19 GW **PROJECT NUMBER:** 60592794 - 1.03.003 **FIELD PERSONNEL:** I. Partin, J. Rogalz

DATE: 7/12/19 **WEATHER:** Clear - 86°F

MONITORING WELL ID: ROST-4-PZ(E) **SAMPLE ID:** ROST4PZE-ROX-071219

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: N/A 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): 36.74' ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~40.87 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): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 8.26 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	1104	36.50	Hazy	Slight	22.8	3.25	1.830 mS/cm uS/cm	6.84	90.8	37.94
~350	1105			Moderate	21.5	0.86	1.818 mS/cm uS/cm	6.86	26.9	32.72
~600	1106				21.5	0.56	1.818 mS/cm uS/cm	6.88	-1.6	26.51
~900	1107				21.2	0.42	1.817 mS/cm uS/cm	6.89	-28.7	22.43
~1200	1108				21.1	0.39	1.817 mS/cm uS/cm	6.89	-49.3	19.91
~1500	1109				21.1	0.33	1.816 mS/cm uS/cm	6.90	-64.6	18.92
~1800	1110				21.0	0.31	1.816 mS/cm uS/cm	6.92	-70.4	17.74
~2100	1111				21.0	0.29	1.817 mS/cm uS/cm	6.93	-76.0	28.42
~2400	1112				21.1	0.29	1.816 mS/cm uS/cm	6.92	-79.2	51.45
~2700	1113				21.1	0.28	1.816 mS/cm uS/cm	6.93	-81.4	49.22
~3000	1114				21.0	0.28	1.817 mS/cm uS/cm	6.93	-80.6	53.21
~3300	1115				21.0	0.29	1.819 mS/cm uS/cm	6.94	-79.2	28.12
~3600	1116				21.1	0.28	1.821 mS/cm uS/cm	6.94	-80.1	25.69
~3900	1117				21.1	0.28	1.822 mS/cm uS/cm	6.94	-80.8	24.15
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1104 **Elapsed Time (min):** ~13min **Water Quality Meter ID & SN:** YSI ProDSS - 17D101950

Stop Time: 1117 **Average Purge Rate (mL/min):** ~300 **Date Calibrated:** 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 **Sample Time:** 1120 **Lab Analysis:** VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: ~3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: J. Partin, J. Rogatz

DATE: 7/12/19 WEATHER: Clear ~78°F

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG-ROX-071219

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: N/A 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): 36.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~40.57' ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.28 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.93 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A 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)
Initial	0842	36.67	Hazy	Slight	19.9	1.43	1.735 mS/cm uS/cm	6.36	13.9	29.20
~300	0843				19.6	0.69	1.738 mS/cm uS/cm	6.42	2.0	21.21
~600	0844				19.3	0.41	1.740 mS/cm uS/cm	6.49	-41.3	19.69
~900	0845	36.68			19.2	0.34	1.743 mS/cm uS/cm	6.54	-60.1	16.57
~1200	0846				19.1	0.31	1.745 mS/cm uS/cm	6.56	-68.4	15.79
~1500	0847				19.1	0.28	1.749 mS/cm uS/cm	6.60	-72.8	13.86
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 0842 Elapsed Time (min): ~5 min Water Quality Meter ID & SN: YSI ProDSS - 17D106950

Stop Time: 0847 Average Purge Rate (mL/min): ~300 Date Calibrated: 7/12/19

SAMPLING DATA

Sample Date: 7/12/19 Sample Time: 0850 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: JP

COMMENTS:

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

Total Purge Volume: ~1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q19 GW PROJECT NUMBER: 60592794 - 1.03.003 FIELD PERSONNEL: B. Howell T. Jones

DATE: 7/15/19 WEATHER: Cloudy 75°F

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-071519

INITIAL DATA

Well Diameter): 6 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 72.83 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 39.74 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: BAK 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NC ft		
Depth to Top of Screen (btoc): 46.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 51.83 ft btoc	Wellbore PID/FID Reading: 1.3 ppm
Screen Length: 26 ft		
Water Column Height (not including NAPL): 33.09 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0851	39.81	Cloudy	Slight	23.3	0.45	1.786 mS/cm uS/cm	6.71	-156.7	5.38
300	0852				23.4	0.42	1.785 mS/cm uS/cm	6.73	-157.7	5.30
600	0853				23.4	0.33	1.788 mS/cm uS/cm	6.75	-159.7	5.15
900	0854				23.4	0.28	1.790 mS/cm uS/cm	6.75	-160.5	5.38
1200	0855	39.81			23.3	0.24	1.789 mS/cm uS/cm	6.76	-161.2	5.46
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0851 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 18K101872

Stop Time: 0855 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/19

SAMPLING DATA

Sample Date: 7/15/19 Sample Time: 0900 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: TJ BH

COMMENTS:

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

Total Purge Volume: 1200 mL

Appendix B

Data Review Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-172762-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 7/31/2019

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

Sample Identification	Sample Identification
TB-ROX-070819-8260	TB-ROX-070819-8011
MW4-ROX-070819-EB	MW4-ROX-070819
MW25-ROX-070819	MW8-ROX-070819
MW7-ROX-070819	MW7-ROX-070819-Dup

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated PAHs were detected in the method blank; acetone was detected in trip blank TB-ROX-070819-8260; and VOCs, SVOCs, and PAHs were detected in equipment blank MW4-ROX-070819-EB. LCS/LCD recoveries, and/or LCS/LCSD RPDs, for 2-hexanone and several SVOCs were outside evaluation criteria. Several SVOC and/or PAH surrogate recoveries were outside criteria in LCS and method blank samples. The PAH internal standard area recovery for perylene-d_{12} was outside criteria in sample MW8-ROX-070819. In field duplicate pair MW7-ROX-070819/MW7-ROX-070819-Dup, results for phenol were qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**J**). VOCs and phenol in sample MW8-ROX-070819, and VOCs in field duplicate pair MW7-ROX-070819/MW7-ROX-070819-Dup, were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verification for dibenz[a,h]acridine was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
TB-ROX-070819-8260	VOCs	Acetone	31 µg/L
MW4-ROX-070819-EB	VOCs	2-Butanone (MEK)	3.1 µg/L
MW4-ROX-070819-EB	PAHs	Phenanthrene	0.033 µg/L
MW4-ROX-070819-EB	PAHs	2-Methylnaphthalene	0.020 µg/L
MW4-ROX-070819-EB	SVOCs	bis(2-Ethylhexyl)phthalate	25 µg/L
MB 400-447399/1-A	PAHs	Dibenz(a,h)anthracene	0.0709 µg/L
MB 400-447399/1-A	PAHs	Fluoranthene	0.0350 µg/L
MB 400-447399/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.0779 µg/L
MB 400-447399/1-A	PAHs	Pyrene	0.0309 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 400-448145/1002	VOCs	2-Hexanone	**140**	NA	65-137
LCS/LCSD 400-447399/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	34/48	**32**	10-129/30
LCS/LCSD 400-447399/4-A/5-A	SVOCs	Benzenethiol	**3/4**	**41**	10-120/30
LCS/LCSD 400-447763/20-A/21-A	SVOCs	Benzenethiol	**4/3**	16	10-120/30
LCSD 400-447763/3-A	SVOCs	Aniline	54	**34**	29-120/30
LCSD 400-447763/3-A	SVOCs	Benzoic acid	**214**	**200**	10-150/30
LCSD 400-447763/3-A	SVOCs	2,4-Dinitrophenol	**164**	4	10-150/30
LCSD 400-447763/3-A	SVOCs	Indene	**148**	**200**	47-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-447399/4-A/5-A and LCS/LCSD 400-447763/20-A/21-A; 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-070819	SVOCs	Benzenethiol	**UJ**
MW25-ROX-070819	SVOCs	Benzenethiol	**UJ**
MW8-ROX-070819	SVOCs	Benzenethiol	**UJ**
MW7-ROX-070819	SVOCs	Benzenethiol	**UJ**
MW7-ROX-070819-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-447399/4-A	SVOCs	2-Fluorophenol	**0.2**	10-120
LCS 400-447399/4-A	SVOCs	Phenol-d_5	**2**	10-120
LCS 400-447399/4-A	SVOCs	2,4,6-Tribromophenol	**0**	15-135
MB 400-447763/1-A	SVOCs	Nitrobenzene-d_5	**121**	27-120
MB 400-447763/1-A	PAHs	Terphenyl-d_{14}	**155**	33-138

Laboratory control sample LCS 400-447399/4-A and method blank MB 400-447763/1-A are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
MW8-ROX-070819 DL	SVOCs	Perylene-d_{12}	**663947**	681790-2727158

There were no target analytes associated with perylene-d_{12} in the confirmation run (DL); therefore, no qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW7-ROX-070819	MW7-ROX-070819-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW7-ROX-070819	MW7-ROX-070819-Dup	SVOCs	Phenol	**48**	**J/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

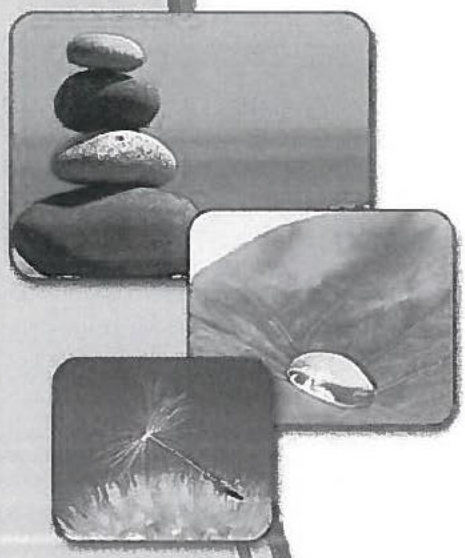
12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for dibenz[a,h]acridine was outside evaluation criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-070819	SVOCs	Dibenz[a,h]acridine	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-172762-1
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:
7/26/2019 4:30:17 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 7/31/19 MR

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: 400-172762-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-172762-1

Comments
No additional comments.

Receipt
The samples were received on 7/9/2019 8:53 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 2.8° C.

GC/MS VOA
Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW8-ROX-070819 (400-172762-6), MW7-ROX-070819 (400-172762-7) and MW7-ROX-070819-DUP (400-172762-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 400-448145 recovered outside control limits for the following analyte: 2-Hexanone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 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-070819-8260 (400-172762-1), MW4-ROX-070819-EB (400-172762-3), MW4-ROX-070819 (400-172762-4), MW25-ROX-070819 (400-172762-5), MW8-ROX-070819 (400-172762-6), MW7-ROX-070819 (400-172762-7) and MW7-ROX-070819-DUP (400-172762-8). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, an acid-labile compound that degrades in an acidic medium.

Method(s) 8260B: Sample TB-ROX-070819-8260 (400-172762-1) contained Acetone above the reporting limit. Reanalysis was performed with concurring results.

Method(s) 8260B: Sample MW4-ROX-070819-EB (400-172762-3) contained 2-Butanone (MEK) between the method detection limit and the reporting limit. Reanalysis was performed with concurring results.

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

GC/MS Semi VOA
Method(s) 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-447399 and analytical batch 400-448057 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene, Benzenethiol.

Method(s) 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-447399 and analytical batch 400-448057 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448057 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, 4-Chloro-3-methylphenol, Aniline and 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448057 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D LL: The method blank for preparation batch 400-447399 and analytical batch 400-448058 contained Indeno[1,2,3-cd]pyrene, Pyrene, Fluoranthene and Dibenz(a,h)anthracene 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: 400-172762-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8270D: The probable swing of the pH has caused the LCS to fail for the acid surrogates. The surrogate recovery for the associated samples was within the control limits; therefore, the data are flagged and reported. (LCS 400-447399/4-A)

Method(s) 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-447763/1-A). These results have been reported and qualified.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448515 recovered above the upper control limit for 4-Chloro-3-methylphenol, 4-Bromophenyl phenyl ether, Aniline and 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448515 recovered above the upper control limit for Indene and Benzoic acid. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448515 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-447763 and analytical batch 400-448576 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448576 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448576 recovered outside acceptance criteria, low biased, for Dibenz[a,h]acridine. 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(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-447763/1-A). These results have been reported and qualified.

Method(s) 8270D: The following analyte(s) recovered outside control limits for the LCS and LCSD associated with preparation batch 400-447763 and analytical batch 400-448576: 2,4-Dinitrophenol, Indene and Benzoic acid. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-447763 and analytical batch 400-448576 recovered outside control limits for the following analytes: Aniline, Indene and Benzoic acid.

Method(s) 8270D: Sample MW4-ROX-070819-EB (400-172762-3) was re-extracted after the 3520 continuous liquid liquid extractor overflowed into the boiling flask during extraction. The re-extract for this sample contained Bis(2-ethylhexyl) phthalate above the project specific action limit. There was insufficient sample to perform a re-extraction and/or re-analysis; therefore, the data have been reported.

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

GC Semi VOA

Method(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448291 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: 400-172762-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448291 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: 400-172762-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-172762-1	TB-ROX-070819-8260	Water	07/08/19 00:00	07/09/19 08:53	
400-172762-2	TB-ROX-070819-8011	Water	07/08/19 00:00	07/09/19 08:53	
400-172762-3	MW4-ROX-070819-EB	Water	07/08/19 10:45	07/09/19 08:53	
400-172762-4	MW4-ROX-070819	Water	07/08/19 11:20	07/09/19 08:53	
400-172762-5	MW25-ROX-070819	Water	07/08/19 12:00	07/09/19 08:53	
400-172762-6	MW8-ROX-070819	Water	07/08/19 13:05	07/09/19 08:53	
400-172762-7	MW7-ROX-070819	Water	07/08/19 13:55	07/09/19 08:53	
400-172762-8	MW7-ROX-070819-DUP	Water	07/08/19 13:55	07/09/19 08:53	

Detection Summary

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

Job ID: 400-172762-1

Client Sample ID: TB-ROX-070819-8260 — Lab Sample ID: 400-172762-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	31		25	10	ug/L	1		8260B	Total/NA

Client Sample ID: TB-ROX-070819-8011 — Lab Sample ID: 400-172762-2

No Detections.

Client Sample ID: MW4-ROX-070819-EB — Lab Sample ID: 400-172762-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.1	J	25	2.6	ug/L	1		8260B	Total/NA
Phenanthrene	0.033	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.020	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	25		9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW4-ROX-070819 — Lab Sample ID: 400-172762-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.3		1.0	0.74	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.084	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
Di-n-octyl phthalate	1.3	J	10	0.44	ug/L	1		8270D	Total/NA

Client Sample ID: MW25-ROX-070819 — Lab Sample ID: 400-172762-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	16		1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.4		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: MW8-ROX-070819 — Lab Sample ID: 400-172762-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	540		500	250	ug/L	500		8260B	Total/NA
Toluene	480	J	500	210	ug/L	500		8260B	Total/NA
Xylenes, Total	890	J	5000	800	ug/L	500		8260B	Total/NA
Benzene - DL	280000		2000	760	ug/L	2000		8260B	Total/NA
1-Methylnaphthalene	8.3		0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	3.9		0.20	0.020	ug/L	1		8270D LL	Total/NA
Indene	3.4	J	10	1.0	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.4	J	20	1.1	ug/L	1		8270D	Total/NA
Pentachlorophenol	2.5	J	20	1.8	ug/L	1		8270D	Total/NA
Phenol - DL	310		50	13	ug/L	5		8270D	Total/NA

Client Sample ID: MW7-ROX-070819 — Lab Sample ID: 400-172762-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	520	J	1000	500	ug/L	1000		8260B	Total/NA
Toluene	1500		1000	410	ug/L	1000		8260B	Total/NA
Benzene - DL	1300000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	2.2		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	3.5		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzoic acid	13	J	29	7.0	ug/L	1		8270D	Total/NA
2,4-Dimethylphenol	4.6	J	9.6	3.3	ug/L	1		8270D	Total/NA
Indene	3.4	J	9.6	0.96	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	2.7	J	19	1.0	ug/L	1		8270D	Total/NA
Phenol	80	J	9.6	2.5	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: 400-172762-1

Client Sample ID: MW7-ROX-070819-DUP

Lab Sample ID: 400-172762-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1500		1000	410	ug/L	1000		8260B	Total/NA
Benzene - DL	1400000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	2.7		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	4.2		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzoic acid	15	J	29	7.0	ug/L	1		8270D	Total/NA
2,4-Dimethylphenol	4.4	J	9.6	3.3	ug/L	1		8270D	Total/NA
Indene	3.8	J	9.6	0.96	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	2.8	J	19	1.0	ug/L	1		8270D	Total/NA
Phenol	49	J	9.6	2.5	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 400-172762-1

Client Sample ID: TB-ROX-070819-8260

Date Collected: 07/08/19 00:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	31		25	10	ug/L			07/16/19 13:49	1
Acrolein	ND		20	10	ug/L			07/16/19 13:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 13:49	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 13:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 13:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 13:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 13:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 13:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 13:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 13:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 13:49	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 13:49	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 13:49	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 13:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 13:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 13:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 13:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 13:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 13:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 13:49	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 13:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 13:49	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 13:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 13:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 13:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 13:49	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 13:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 13:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 13:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 13:49	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 13:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 13:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 13:49	1

Client Sample ID: TB-ROX-070819-8260
Date Collected: 07/08/19 00:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-1
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			07/16/19 13:49	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 13:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 13:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 13:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 13:49	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 13:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 13:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 13:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 13:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 13:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 13:49	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 13:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 13:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 13:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 13:49	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 13:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 13:49	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/16/19 13:49*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*07/16/19 13:49*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 13:49*	*1*

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

Job ID: 400-172762-1

Client Sample ID: TB-ROX-070819-8011
Date Collected: 07/08/19 00:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-2
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		07/16/19 12:15	07/16/19 17:56	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/16/19 12:15	07/16/19 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*07/16/19 12:15*	*07/16/19 17:56*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW4-ROX-070819-EB
Date Collected: 07/08/19 10:45
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-3
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			07/16/19 14:16	1
Acrolein	ND		20	10	ug/L			07/16/19 14:16	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 14:16	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 14:16	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 14:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 14:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 14:16	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 14:16	1
2-Butanone (MEK)	3.1	J	25	2.6	ug/L			07/16/19 14:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 14:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 14:16	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 14:16	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 14:16	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 14:16	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 14:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 14:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 14:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 14:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 14:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 14:16	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 14:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 14:16	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 14:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 14:16	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 14:16	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 14:16	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 14:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 14:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 14:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 14:16	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 14:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 14:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 14:16	1

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

Job ID: 400-172762-1

Client Sample ID: MW4-ROX-070819-EB

Lab Sample ID: 400-172762-3

Date Collected: 07/08/19 10:45
Date Received: 07/09/19 08:53

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			07/16/19 14:16	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 14:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 14:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 14:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 14:16	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 14:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 14:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 14:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 14:16	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 14:16	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 14:16	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 14:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 14:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 14:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 14:16	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 14:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 14:16	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*07/16/19 14:16*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*07/16/19 14:16*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/16/19 14:16*	*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		07/10/19 16:16	07/15/19 18:44	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1
Anthracene	ND		0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Chrysene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Fluoranthene	ND		0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1
Fluorene	ND		0.19	0.020	ug/L		07/10/19 16:16	07/15/19 18:44	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/10/19 16:16	07/15/19 18:44	1
Phenanthrene	0.033	J	0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1
Pyrene	ND		0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1
2-Methylnaphthalene	0.020	J	0.19	0.019	ug/L		07/10/19 16:16	07/15/19 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*127*		*33 - 138*	*07/10/19 16:16*	*07/15/19 18:44*	*1*
2-Fluorobiphenyl	*95*		*15 - 122*	*07/10/19 16:16*	*07/15/19 18:44*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW4-ROX-070819-EB
Date Collected: 07/08/19 10:45
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	87		19 - 130	07/10/19 16:16	07/15/19 18:44	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		07/10/19 16:16	07/15/19 20:48	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/10/19 16:16	07/15/19 20:48	1
Benzoic acid	ND		29	7.0	ug/L		07/10/19 16:16	07/15/19 20:48	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/10/19 16:16	07/15/19 20:48	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/10/19 16:16	07/15/19 20:48	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/10/19 16:16	07/15/19 20:48	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		07/10/19 16:16	07/15/19 20:48	1
Bis(2-ethylhexyl) phthalate	25		9.6	4.8	ug/L		07/10/19 16:16	07/15/19 20:48	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/10/19 16:16	07/15/19 20:48	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/10/19 16:16	07/15/19 20:48	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/10/19 16:16	07/15/19 20:48	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/10/19 16:16	07/15/19 20:48	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/10/19 16:16	07/15/19 20:48	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/10/19 16:16	07/15/19 20:48	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/10/19 16:16	07/15/19 20:48	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/10/19 16:16	07/15/19 20:48	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/10/19 16:16	07/15/19 20:48	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/10/19 16:16	07/15/19 20:48	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		07/10/19 16:16	07/15/19 20:48	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		07/10/19 16:16	07/15/19 20:48	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/10/19 16:16	07/15/19 20:48	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/10/19 16:16	07/15/19 20:48	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/10/19 16:16	07/15/19 20:48	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/10/19 16:16	07/15/19 20:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/10/19 16:16	07/15/19 20:48	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/10/19 16:16	07/15/19 20:48	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		07/10/19 16:16	07/15/19 20:48	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/10/19 16:16	07/15/19 20:48	1
Indene	ND		9.6	0.96	ug/L		07/10/19 16:16	07/15/19 20:48	1
Isophorone	ND		9.6	0.55	ug/L		07/10/19 16:16	07/15/19 20:48	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/10/19 16:16	07/15/19 20:48	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		07/10/19 16:16	07/15/19 20:48	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/10/19 16:16	07/15/19 20:48	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/10/19 16:16	07/15/19 20:48	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/10/19 16:16	07/15/19 20:48	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/10/19 16:16	07/15/19 20:48	1
2-Nitrophenol	ND		9.6	0.62	ug/L		07/10/19 16:16	07/15/19 20:48	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/10/19 16:16	07/15/19 20:48	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/10/19 16:16	07/15/19 20:48	1

Client Sample ID: MW4-ROX-070819-EB

Lab Sample ID: 400-172762-3

Date Collected: 07/08/19 10:45
Date Received: 07/09/19 08:53

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		07/10/19 16:16	07/15/19 20:48	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/10/19 16:16	07/15/19 20:48	1
Pentachlorophenol	ND		19	1.7	ug/L		07/10/19 16:16	07/15/19 20:48	1
Phenol	ND		9.6	2.5	ug/L		07/10/19 16:16	07/15/19 20:48	1
Pyridine	ND		9.6	3.1	ug/L		07/10/19 16:16	07/15/19 20:48	1
Quinoline	ND		9.6	5.7	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/10/19 16:16	07/15/19 20:48	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/10/19 16:16	07/15/19 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*07/10/19 16:16*	*07/15/19 20:48*	*1*
2-Fluorophenol	*73*		*10 - 120*	*07/10/19 16:16*	*07/15/19 20:48*	*1*
Nitrobenzene-d5	*95*		*27 - 120*	*07/10/19 16:16*	*07/15/19 20:48*	*1*
Phenol-d5	*91*		*10 - 120*	*07/10/19 16:16*	*07/15/19 20:48*	*1*
Terphenyl-d14	*103*		*53 - 125*	*07/10/19 16:16*	*07/15/19 20:48*	*1*
2,4,6-Tribromophenol	*87*		*15 - 135*	*07/10/19 16:16*	*07/15/19 20:48*	*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		0.031	0.0056	ug/L		07/16/19 12:15	07/16/19 18:19	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/16/19 12:15	07/16/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/16/19 12:15*	*07/16/19 18:19*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW4-ROX-070819
Date Collected: 07/08/19 11:20
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-4
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			07/16/19 17:22	1
Acrolein	ND		20	10	ug/L			07/16/19 17:22	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 17:22	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 17:22	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 17:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 17:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 17:22	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 17:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 17:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 17:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 17:22	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 17:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 17:22	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 17:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 17:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 17:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 17:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 17:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 17:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 17:22	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 17:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 17:22	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 17:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 17:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 17:22	1
Methyl tert-butyl ether	3.3		1.0	0.74	ug/L			07/16/19 17:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 17:22	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 17:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 17:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 17:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 17:22	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 17:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 17:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 17:22	1

Client Sample ID: MW4-ROX-070819

Lab Sample ID: 400-172762-4

Date Collected: 07/08/19 11:20
Date Received: 07/09/19 08:53

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			07/16/19 17:22	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 17:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 17:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 17:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 17:22	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 17:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 17:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 17:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 17:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 17:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 17:22	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 17:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 17:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 17:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 17:22	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 17:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 17:22	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*07/16/19 17:22*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/16/19 17:22*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/16/19 17:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
Anthracene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Chrysene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Fluoranthene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
Fluorene	ND		0.20	0.021	ug/L		07/12/19 14:17	07/19/19 01:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/19/19 01:23	1
Phenanthrene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
Pyrene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
1-Methylnaphthalene	0.084	J	0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/19/19 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*106*		*33 - 138*	*07/12/19 14:17*	*07/19/19 01:23*	*1*
2-Fluorobiphenyl	*79*		*15 - 122*	*07/12/19 14:17*	*07/19/19 01:23*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW4-ROX-070819
Date Collected: 07/08/19 11:20
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		19 - 130	07/12/19 14:17	07/19/19 01:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*	10	3.8	ug/L		07/12/19 14:17	07/18/19 19:12	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/12/19 14:17	07/18/19 19:12	1
Benzoic acid	ND	*	30	7.3	ug/L		07/12/19 14:17	07/18/19 19:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/12/19 14:17	07/18/19 19:12	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/12/19 14:17	07/18/19 19:12	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/12/19 14:17	07/18/19 19:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/12/19 14:17	07/18/19 19:12	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/12/19 14:17	07/18/19 19:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/19 14:17	07/18/19 19:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/19 14:17	07/18/19 19:12	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/12/19 14:17	07/18/19 19:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/19 14:17	07/18/19 19:12	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
Dibenz[a,h]acridine	ND	UJ	10	3.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
Dibenzofuran	ND		10	0.52	ug/L		07/12/19 14:17	07/18/19 19:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
Diethyl phthalate	ND		10	0.70	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/19 14:17	07/18/19 19:12	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/12/19 14:17	07/18/19 19:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/19 14:17	07/18/19 19:12	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,4-Dinitrophenol	ND	*	30	3.4	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/19 14:17	07/18/19 19:12	1
Di-n-octyl phthalate	1.3	J	10	0.44	ug/L		07/12/19 14:17	07/18/19 19:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/12/19 14:17	07/18/19 19:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/19 14:17	07/18/19 19:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/19 14:17	07/18/19 19:12	1
Indene	ND	*	10	1.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
Isophorone	ND		10	0.57	ug/L		07/12/19 14:17	07/18/19 19:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/19 14:17	07/18/19 19:12	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/19 14:17	07/18/19 19:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/19 14:17	07/18/19 19:12	1
4-Nitroaniline	ND		10	2.5	ug/L		07/12/19 14:17	07/18/19 19:12	1
Nitrobenzene	ND		10	0.55	ug/L		07/12/19 14:17	07/18/19 19:12	1
2-Nitrophenol	ND		10	0.65	ug/L		07/12/19 14:17	07/18/19 19:12	1
4-Nitrophenol	ND	*	10	2.1	ug/L		07/12/19 14:17	07/18/19 19:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/19 14:17	07/18/19 19:12	1

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

Job ID: 400-172762-1

Client Sample ID: MW4-ROX-070819
Date Collected: 07/08/19 11:20
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/19 14:17	07/18/19 19:12	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/12/19 14:17	07/18/19 19:12	1
Pentachlorophenol	ND		20	1.8	ug/L		07/12/19 14:17	07/18/19 19:12	1
Phenol	ND		10	2.6	ug/L		07/12/19 14:17	07/18/19 19:12	1
Pyridine	ND		10	3.2	ug/L		07/12/19 14:17	07/18/19 19:12	1
Quinoline	ND		10	6.0	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/19 14:17	07/18/19 19:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/19 14:17	07/18/19 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*07/12/19 14:17*	*07/18/19 19:12*	*1*
2-Fluorophenol	*55*		*10 - 120*	*07/12/19 14:17*	*07/18/19 19:12*	*1*
Nitrobenzene-d5	*90*		*27 - 120*	*07/12/19 14:17*	*07/18/19 19:12*	*1*
Phenol-d5	*78*		*10 - 120*	*07/12/19 14:17*	*07/18/19 19:12*	*1*
Terphenyl-d14	*90*		*53 - 125*	*07/12/19 14:17*	*07/18/19 19:12*	*1*
2,4,6-Tribromophenol	*98*		*15 - 135*	*07/12/19 14:17*	*07/18/19 19:12*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		07/16/19 12:15	07/16/19 18:42	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/16/19 12:15	07/16/19 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*07/16/19 12:15*	*07/16/19 18:42*	*1*

Client Sample Results

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

Job ID: 400-172762-1

Client Sample ID: MW25-ROX-070819

Lab Sample ID: 400-172762-5

Date Collected: 07/08/19 12:00
Date Received: 07/09/19 08:53

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			07/16/19 17:48	1
Acrolein	ND		20	10	ug/L			07/16/19 17:48	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 17:48	1
Benzene	16		1.0	0.38	ug/L			07/16/19 17:48	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 17:48	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 17:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 17:48	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 17:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 17:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 17:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 17:48	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 17:48	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 17:48	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 17:48	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 17:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 17:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 17:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 17:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 17:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 17:48	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 17:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 17:48	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 17:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 17:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 17:48	1
Methyl tert-butyl ether	2.4		1.0	0.74	ug/L			07/16/19 17:48	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 17:48	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 17:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 17:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 17:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 17:48	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 17:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 17:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 17:48	1

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

Job ID: 400-172762-1

Client Sample ID: MW25-ROX-070819
Date Collected: 07/08/19 12:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-5
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			07/16/19 17:48	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 17:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 17:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 17:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 17:48	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 17:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 17:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 17:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 17:48	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 17:48	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 17:48	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 17:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 17:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 17:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 17:48	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 17:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 17:48	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*07/16/19 17:48*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/16/19 17:48*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/16/19 17:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
Acenaphthylene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
Anthracene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
Benzo[a]anthracene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Benzo[a]pyrene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Benzo[b]fluoranthene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Benzo[g,h,i]perylene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Benzo[k]fluoranthene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Chrysene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Dibenz(a,h)anthracene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Fluoranthene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
Fluorene	ND		0.21	0.022	ug/L		07/10/19 11:57	07/15/19 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.042	ug/L		07/10/19 11:57	07/15/19 19:01	1
Phenanthrene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
Pyrene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1
2-Methylnaphthalene	ND		0.21	0.021	ug/L		07/10/19 11:57	07/15/19 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*33 - 138*	*07/10/19 11:57*	*07/15/19 19:01*	*1*
2-Fluorobiphenyl	*79*		*15 - 122*	*07/10/19 11:57*	*07/15/19 19:01*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW25-ROX-070819
Date Collected: 07/08/19 12:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-5
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	07/10/19 11:57	07/15/19 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.0	ug/L		07/10/19 11:57	07/15/19 21:09	1
Benzenethiol	ND	* UJ	11	1.8	ug/L		07/10/19 11:57	07/15/19 21:09	1
Benzoic acid	ND		32	7.7	ug/L		07/10/19 11:57	07/15/19 21:09	1
Benzyl alcohol	ND		11	2.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
Bis(2-chloroethoxy)methane	ND		11	0.73	ug/L		07/10/19 11:57	07/15/19 21:09	1
Bis(2-chloroethyl)ether	ND		11	0.78	ug/L		07/10/19 11:57	07/15/19 21:09	1
bis (2-chloroisopropyl) ether	ND		11	0.86	ug/L		07/10/19 11:57	07/15/19 21:09	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		07/10/19 11:57	07/15/19 21:09	1
4-Bromophenyl phenyl ether	ND		11	0.34	ug/L		07/10/19 11:57	07/15/19 21:09	1
Butyl benzyl phthalate	ND		11	0.73	ug/L		07/10/19 11:57	07/15/19 21:09	1
4-Chloroaniline	ND		11	3.6	ug/L		07/10/19 11:57	07/15/19 21:09	1
4-Chloro-3-methylphenol	ND		11	4.0	ug/L		07/10/19 11:57	07/15/19 21:09	1
2-Chloronaphthalene	ND		11	0.55	ug/L		07/10/19 11:57	07/15/19 21:09	1
2-Chlorophenol	ND		11	2.3	ug/L		07/10/19 11:57	07/15/19 21:09	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
Dibenz[a,h]acridine	ND		11	3.2	ug/L		07/10/19 11:57	07/15/19 21:09	1
Dibenzofuran	ND		11	0.55	ug/L		07/10/19 11:57	07/15/19 21:09	1
3,3'-Dichlorobenzidine	ND		11	2.7	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		07/10/19 11:57	07/15/19 21:09	1
Diethyl phthalate	ND		11	0.74	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		07/10/19 11:57	07/15/19 21:09	1
Dimethyl phthalate	ND		11	0.63	ug/L		07/10/19 11:57	07/15/19 21:09	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		07/10/19 11:57	07/15/19 21:09	1
4,6-Dinitro-ortho-cresol	ND		11	2.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		07/10/19 11:57	07/15/19 21:09	1
Di-n-octyl phthalate	ND		11	0.46	ug/L		07/10/19 11:57	07/15/19 21:09	1
1,4-Dioxane	ND		11	1.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
Hexachlorobenzene	ND		11	0.26	ug/L		07/10/19 11:57	07/15/19 21:09	1
Hexachlorocyclopentadiene	ND	*	21	2.7	ug/L		07/10/19 11:57	07/15/19 21:09	1
Hexachloroethane	ND		11	4.4	ug/L		07/10/19 11:57	07/15/19 21:09	1
Indene	ND		11	1.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
Isophorone	ND		11	0.60	ug/L		07/10/19 11:57	07/15/19 21:09	1
2-Methylphenol	ND		11	1.9	ug/L		07/10/19 11:57	07/15/19 21:09	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/10/19 11:57	07/15/19 21:09	1
2-Nitroaniline	ND		11	2.3	ug/L		07/10/19 11:57	07/15/19 21:09	1
3-Nitroaniline	ND		11	1.9	ug/L		07/10/19 11:57	07/15/19 21:09	1
4-Nitroaniline	ND		11	2.6	ug/L		07/10/19 11:57	07/15/19 21:09	1
Nitrobenzene	ND		11	0.58	ug/L		07/10/19 11:57	07/15/19 21:09	1
2-Nitrophenol	ND		11	0.69	ug/L		07/10/19 11:57	07/15/19 21:09	1
4-Nitrophenol	ND		11	2.2	ug/L		07/10/19 11:57	07/15/19 21:09	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		07/10/19 11:57	07/15/19 21:09	1

Client Sample ID: MW25-ROX-070819
Date Collected: 07/08/19 12:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-5
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		11	3.5	ug/L		07/10/19 11:57	07/15/19 21:09	1
N-Nitrosodiphenylamine	ND		11	0.50	ug/L		07/10/19 11:57	07/15/19 21:09	1
Pentachlorophenol	ND		21	1.9	ug/L		07/10/19 11:57	07/15/19 21:09	1
Phenol	ND		11	2.7	ug/L		07/10/19 11:57	07/15/19 21:09	1
Pyridine	ND		11	3.4	ug/L		07/10/19 11:57	07/15/19 21:09	1
Quinoline	ND		11	6.3	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		07/10/19 11:57	07/15/19 21:09	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		07/10/19 11:57	07/15/19 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*07/10/19 11:57*	*07/15/19 21:09*	*1*
2-Fluorophenol	*65*		*10 - 120*	*07/10/19 11:57*	*07/15/19 21:09*	*1*
Nitrobenzene-d5	*94*		*27 - 120*	*07/10/19 11:57*	*07/15/19 21:09*	*1*
Phenol-d5	*84*		*10 - 120*	*07/10/19 11:57*	*07/15/19 21:09*	*1*
Terphenyl-d14	*95*		*53 - 125*	*07/10/19 11:57*	*07/15/19 21:09*	*1*
2,4,6-Tribromophenol	*93*		*15 - 135*	*07/10/19 11:57*	*07/15/19 21:09*	*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		0.029	0.0053	ug/L		07/16/19 12:15	07/16/19 19:05	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/16/19 12:15	07/16/19 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*07/16/19 12:15*	*07/16/19 19:05*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW8-ROX-070819
Date Collected: 07/08/19 13:05
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-6
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			07/16/19 18:15	500
Acrolein	ND		10000	5000	ug/L			07/16/19 18:15	500
Acrylonitrile	ND		5000	1400	ug/L			07/16/19 18:15	500
Bromobenzene	ND		500	270	ug/L			07/16/19 18:15	500
Bromochloromethane	ND		500	260	ug/L			07/16/19 18:15	500
Bromodichloromethane	ND		500	250	ug/L			07/16/19 18:15	500
Bromoform	ND		2500	360	ug/L			07/16/19 18:15	500
Bromomethane	ND		500	490	ug/L			07/16/19 18:15	500
2-Butanone (MEK)	ND		13000	1300	ug/L			07/16/19 18:15	500
Carbon disulfide	ND		500	250	ug/L			07/16/19 18:15	500
Carbon tetrachloride	ND		500	250	ug/L			07/16/19 18:15	500
Chlorobenzene	ND		500	250	ug/L			07/16/19 18:15	500
Dibromochloromethane	ND		500	250	ug/L			07/16/19 18:15	500
Chloroethane	ND		500	380	ug/L			07/16/19 18:15	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			07/16/19 18:15	500
Chloroform	ND		500	300	ug/L			07/16/19 18:15	500
1-Chlorohexane	ND		500	350	ug/L			07/16/19 18:15	500
Chloromethane	ND		500	420	ug/L			07/16/19 18:15	500
cis-1,2-Dichloroethene	ND		500	250	ug/L			07/16/19 18:15	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			07/16/19 18:15	500
1,2-Dichlorobenzene	ND		500	250	ug/L			07/16/19 18:15	500
1,3-Dichlorobenzene	ND		500	270	ug/L			07/16/19 18:15	500
1,4-Dichlorobenzene	ND		500	320	ug/L			07/16/19 18:15	500
Dichlorodifluoromethane	ND		500	430	ug/L			07/16/19 18:15	500
1,1-Dichloroethane	ND		500	250	ug/L			07/16/19 18:15	500
1,2-Dichloroethane	ND		500	250	ug/L			07/16/19 18:15	500
1,1-Dichloroethene	ND		500	250	ug/L			07/16/19 18:15	500
1,2-Dichloropropane	ND		500	250	ug/L			07/16/19 18:15	500
1,3-Dichloropropane	ND		500	250	ug/L			07/16/19 18:15	500
2,2-Dichloropropane	ND		500	250	ug/L			07/16/19 18:15	500
1,1-Dichloropropene	ND		500	250	ug/L			07/16/19 18:15	500
Ethylbenzene	540		500	250	ug/L			07/16/19 18:15	500
Ethyl methacrylate	ND		500	300	ug/L			07/16/19 18:15	500
Hexachlorobutadiene	ND		2500	450	ug/L			07/16/19 18:15	500
2-Hexanone	ND	*	13000	1600	ug/L			07/16/19 18:15	500
Isopropylbenzene	ND		500	270	ug/L			07/16/19 18:15	500
Methylene bromide	ND		2500	300	ug/L			07/16/19 18:15	500
Methylene Chloride	ND		2500	1500	ug/L			07/16/19 18:15	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			07/16/19 18:15	500
Methyl tert-butyl ether	ND		500	370	ug/L			07/16/19 18:15	500
m-Xylene & p-Xylene	ND		2500	800	ug/L			07/16/19 18:15	500
Naphthalene	ND		500	500	ug/L			07/16/19 18:15	500
n-Butylbenzene	ND		500	380	ug/L			07/16/19 18:15	500
N-Propylbenzene	ND		500	350	ug/L			07/16/19 18:15	500
o-Chlorotoluene	ND		500	290	ug/L			07/16/19 18:15	500
o-Xylene	ND		2500	300	ug/L			07/16/19 18:15	500
p-Chlorotoluene	ND		500	280	ug/L			07/16/19 18:15	500
p-Isopropyltoluene	ND		500	360	ug/L			07/16/19 18:15	500
sec-Butylbenzene	ND		500	350	ug/L			07/16/19 18:15	500

Client Sample ID: MW8-ROX-070819

Lab Sample ID: 400-172762-6

Date Collected: 07/08/19 13:05
Date Received: 07/09/19 08:53

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		500	500	ug/L			07/16/19 18:15	500
tert-Butylbenzene	ND		500	320	ug/L			07/16/19 18:15	500
1,1,1,2-Tetrachloroethane	ND		500	260	ug/L			07/16/19 18:15	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			07/16/19 18:15	500
Tetrachloroethene	ND		500	290	ug/L			07/16/19 18:15	500
Toluene	480	J	500	210	ug/L			07/16/19 18:15	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			07/16/19 18:15	500
trans-1,3-Dichloropropene	ND		2500	250	ug/L			07/16/19 18:15	500
1,2,3-Trichlorobenzene	ND		500	350	ug/L			07/16/19 18:15	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			07/16/19 18:15	500
1,1,1-Trichloroethane	ND		500	250	ug/L			07/16/19 18:15	500
1,1,2-Trichloroethane	ND		2500	250	ug/L			07/16/19 18:15	500
Trichloroethene	ND		500	250	ug/L			07/16/19 18:15	500
Trichlorofluoromethane	ND		500	260	ug/L			07/16/19 18:15	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			07/16/19 18:15	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			07/16/19 18:15	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			07/16/19 18:15	500
Vinyl acetate	ND		13000	1000	ug/L			07/16/19 18:15	500
Vinyl chloride	ND		500	250	ug/L			07/16/19 18:15	500
Xylenes, Total	890	J	5000	800	ug/L			07/16/19 18:15	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/16/19 18:15*	*500*
Dibromofluoromethane	*97*		*81 - 121*		*07/16/19 18:15*	*500*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 18:15*	*500*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	280000		2000	760	ug/L			07/17/19 17:15	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*07/17/19 17:15*	*2000*
Dibromofluoromethane	*99*		*81 - 121*		*07/17/19 17:15*	*2000*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/17/19 17:15*	*2000*

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		07/10/19 11:57	07/15/19 19:18	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1
Anthracene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Chrysene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1
Fluoranthene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1
Fluorene	ND		0.20	0.021	ug/L		07/10/19 11:57	07/15/19 19:18	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 19:18	1

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

Job ID: 400-172762-1

Client Sample ID: MW8-ROX-070819
Date Collected: 07/08/19 13:05
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-6
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		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1
Pyrene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1
1-Methylnaphthalene	8.3		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1
2-Methylnaphthalene	3.9		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*33 - 138*	*07/10/19 11:57*	*07/15/19 19:18*	*1*
2-Fluorobiphenyl	*52*		*15 - 122*	*07/10/19 11:57*	*07/15/19 19:18*	*1*
Nitrobenzene-d5	*51*		*19 - 130*	*07/10/19 11:57*	*07/15/19 19:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/10/19 11:57	07/15/19 21:30	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/10/19 11:57	07/15/19 21:30	1
Benzoic acid	ND		30	7.4	ug/L		07/10/19 11:57	07/15/19 21:30	1
Benzyl alcohol	ND		10	2.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/10/19 11:57	07/15/19 21:30	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		07/10/19 11:57	07/15/19 21:30	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/10/19 11:57	07/15/19 21:30	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/10/19 11:57	07/15/19 21:30	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/10/19 11:57	07/15/19 21:30	1
4-Chloroaniline	ND		10	3.4	ug/L		07/10/19 11:57	07/15/19 21:30	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/10/19 11:57	07/15/19 21:30	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/10/19 11:57	07/15/19 21:30	1
2-Chlorophenol	ND		10	2.2	ug/L		07/10/19 11:57	07/15/19 21:30	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
Dibenzofuran	ND		10	0.53	ug/L		07/10/19 11:57	07/15/19 21:30	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
Diethyl phthalate	ND		10	0.71	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/10/19 11:57	07/15/19 21:30	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/10/19 11:57	07/15/19 21:30	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/10/19 11:57	07/15/19 21:30	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/10/19 11:57	07/15/19 21:30	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/10/19 11:57	07/15/19 21:30	1
1,4-Dioxane	ND		10	1.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/10/19 11:57	07/15/19 21:30	1
Hexachlorocyclopentadiene	ND	*	20	2.6	ug/L		07/10/19 11:57	07/15/19 21:30	1
Hexachloroethane	ND		10	4.2	ug/L		07/10/19 11:57	07/15/19 21:30	1
Indene	3.4	J	10	1.0	ug/L		07/10/19 11:57	07/15/19 21:30	1
Isophorone	ND		10	0.58	ug/L		07/10/19 11:57	07/15/19 21:30	1
2-Methylphenol	ND		10	1.8	ug/L		07/10/19 11:57	07/15/19 21:30	1
3 & 4 Methylphenol	1.4	J	20	1.1	ug/L		07/10/19 11:57	07/15/19 21:30	1

Client Sample ID: MW8-ROX-070819
Date Collected: 07/08/19 13:05
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/10/19 11:57	07/15/19 21:30	1
3-Nitroaniline	ND		10	1.8	ug/L		07/10/19 11:57	07/15/19 21:30	1
4-Nitroaniline	ND		10	2.5	ug/L		07/10/19 11:57	07/15/19 21:30	1
Nitrobenzene	ND		10	0.56	ug/L		07/10/19 11:57	07/15/19 21:30	1
2-Nitrophenol	ND		10	0.66	ug/L		07/10/19 11:57	07/15/19 21:30	1
4-Nitrophenol	ND		10	2.1	ug/L		07/10/19 11:57	07/15/19 21:30	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/10/19 11:57	07/15/19 21:30	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/10/19 11:57	07/15/19 21:30	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/10/19 11:57	07/15/19 21:30	1
Pentachlorophenol	2.5	J	20	1.8	ug/L		07/10/19 11:57	07/15/19 21:30	1
Pyridine	ND		10	3.2	ug/L		07/10/19 11:57	07/15/19 21:30	1
Quinoline	ND		10	6.1	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/10/19 11:57	07/15/19 21:30	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/10/19 11:57	07/15/19 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*34 - 120*	*07/10/19 11:57*	*07/15/19 21:30*	*1*
2-Fluorophenol	*23*		*10 - 120*	*07/10/19 11:57*	*07/15/19 21:30*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*07/10/19 11:57*	*07/15/19 21:30*	*1*
Phenol-d5	*49*		*10 - 120*	*07/10/19 11:57*	*07/15/19 21:30*	*1*
Terphenyl-d14	*80*		*53 - 125*	*07/10/19 11:57*	*07/15/19 21:30*	*1*
2,4,6-Tribromophenol	*96*		*15 - 135*	*07/10/19 11:57*	*07/15/19 21:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	310		50	13	ug/L		07/10/19 11:57	07/16/19 23:53	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		07/16/19 12:15	07/16/19 19:28	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/16/19 12:15	07/16/19 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*07/16/19 12:15*	*07/16/19 19:28*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW7-ROX-070819
Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			07/16/19 18:41	1000
Acrolein	ND		20000	10000	ug/L			07/16/19 18:41	1000
Acrylonitrile	ND		10000	2800	ug/L			07/16/19 18:41	1000
Bromobenzene	ND		1000	540	ug/L			07/16/19 18:41	1000
Bromochloromethane	ND		1000	520	ug/L			07/16/19 18:41	1000
Bromodichloromethane	ND		1000	500	ug/L			07/16/19 18:41	1000
Bromoform	ND		5000	710	ug/L			07/16/19 18:41	1000
Bromomethane	ND		1000	980	ug/L			07/16/19 18:41	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			07/16/19 18:41	1000
Carbon disulfide	ND		1000	500	ug/L			07/16/19 18:41	1000
Carbon tetrachloride	ND		1000	500	ug/L			07/16/19 18:41	1000
Chlorobenzene	ND		1000	500	ug/L			07/16/19 18:41	1000
Dibromochloromethane	ND		1000	500	ug/L			07/16/19 18:41	1000
Chloroethane	ND		1000	760	ug/L			07/16/19 18:41	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			07/16/19 18:41	1000
Chloroform	ND		1000	600	ug/L			07/16/19 18:41	1000
1-Chlorohexane	ND		1000	700	ug/L			07/16/19 18:41	1000
Chloromethane	ND		1000	830	ug/L			07/16/19 18:41	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			07/16/19 18:41	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			07/16/19 18:41	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			07/16/19 18:41	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			07/16/19 18:41	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			07/16/19 18:41	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			07/16/19 18:41	1000
1,1-Dichloroethane	ND		1000	500	ug/L			07/16/19 18:41	1000
1,2-Dichloroethane	ND		1000	500	ug/L			07/16/19 18:41	1000
1,1-Dichloroethene	ND		1000	500	ug/L			07/16/19 18:41	1000
1,2-Dichloropropane	ND		1000	500	ug/L			07/16/19 18:41	1000
1,3-Dichloropropane	ND		1000	500	ug/L			07/16/19 18:41	1000
2,2-Dichloropropane	ND		1000	500	ug/L			07/16/19 18:41	1000
1,1-Dichloropropene	ND		1000	500	ug/L			07/16/19 18:41	1000
Ethylbenzene	520	J	1000	500	ug/L			07/16/19 18:41	1000
Ethyl methacrylate	ND		1000	600	ug/L			07/16/19 18:41	1000
Hexachlorobutadiene	ND		5000	900	ug/L			07/16/19 18:41	1000
2-Hexanone	ND	*	25000	3100	ug/L			07/16/19 18:41	1000
Isopropylbenzene	ND		1000	530	ug/L			07/16/19 18:41	1000
Methylene bromide	ND		5000	590	ug/L			07/16/19 18:41	1000
Methylene Chloride	ND		5000	3000	ug/L			07/16/19 18:41	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			07/16/19 18:41	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			07/16/19 18:41	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			07/16/19 18:41	1000
Naphthalene	ND		1000	1000	ug/L			07/16/19 18:41	1000
n-Butylbenzene	ND		1000	760	ug/L			07/16/19 18:41	1000
N-Propylbenzene	ND		1000	690	ug/L			07/16/19 18:41	1000
o-Chlorotoluene	ND		1000	570	ug/L			07/16/19 18:41	1000
o-Xylene	ND		5000	600	ug/L			07/16/19 18:41	1000
p-Chlorotoluene	ND		1000	560	ug/L			07/16/19 18:41	1000
p-Isopropyltoluene	ND		1000	710	ug/L			07/16/19 18:41	1000
sec-Butylbenzene	ND		1000	700	ug/L			07/16/19 18:41	1000

Client Sample ID: MW7-ROX-070819

Lab Sample ID: 400-172762-7

Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1000	1000	ug/L			07/16/19 18:41	1000
tert-Butylbenzene	ND		1000	630	ug/L			07/16/19 18:41	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			07/16/19 18:41	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			07/16/19 18:41	1000
Tetrachloroethene	ND		1000	580	ug/L			07/16/19 18:41	1000
Toluene	1500		1000	410	ug/L			07/16/19 18:41	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			07/16/19 18:41	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			07/16/19 18:41	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			07/16/19 18:41	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			07/16/19 18:41	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			07/16/19 18:41	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			07/16/19 18:41	1000
Trichloroethene	ND		1000	500	ug/L			07/16/19 18:41	1000
Trichlorofluoromethane	ND		1000	520	ug/L			07/16/19 18:41	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			07/16/19 18:41	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			07/16/19 18:41	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			07/16/19 18:41	1000
Vinyl acetate	ND		25000	2000	ug/L			07/16/19 18:41	1000
Vinyl chloride	ND		1000	500	ug/L			07/16/19 18:41	1000
Xylenes, Total	ND		10000	1600	ug/L			07/16/19 18:41	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*07/16/19 18:41*	*1000*
Dibromofluoromethane	*97*		*81 - 121*		*07/16/19 18:41*	*1000*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/16/19 18:41*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1300000		5000	1900	ug/L			07/17/19 17:41	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/17/19 17:41*	*5000*
Dibromofluoromethane	*97*		*81 - 121*		*07/17/19 17:41*	*5000*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/17/19 17:41*	*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		07/10/19 11:57	07/15/19 19:35	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1
Anthracene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Chrysene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1
Fluoranthene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1
Fluorene	ND		0.19	0.020	ug/L		07/10/19 11:57	07/15/19 19:35	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:35	1

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

Job ID: 400-172762-1

Client Sample ID: MW7-ROX-070819
Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1
Pyrene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1
1-Methylnaphthalene	2.2		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1
2-Methylnaphthalene	3.5		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*33 - 138*	*07/10/19 11:57*	*07/15/19 19:35*	*1*
2-Fluorobiphenyl	*71*		*15 - 122*	*07/10/19 11:57*	*07/15/19 19:35*	*1*
Nitrobenzene-d5	*81*		*19 - 130*	*07/10/19 11:57*	*07/15/19 19:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		07/10/19 11:57	07/15/19 21:52	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/10/19 11:57	07/15/19 21:52	1
Benzoic acid	13	J	29	7.0	ug/L		07/10/19 11:57	07/15/19 21:52	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/10/19 11:57	07/15/19 21:52	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/10/19 11:57	07/15/19 21:52	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/10/19 11:57	07/15/19 21:52	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		07/10/19 11:57	07/15/19 21:52	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/10/19 11:57	07/15/19 21:52	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/10/19 11:57	07/15/19 21:52	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/10/19 11:57	07/15/19 21:52	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/10/19 11:57	07/15/19 21:52	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/10/19 11:57	07/15/19 21:52	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/10/19 11:57	07/15/19 21:52	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/10/19 11:57	07/15/19 21:52	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/10/19 11:57	07/15/19 21:52	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/10/19 11:57	07/15/19 21:52	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/10/19 11:57	07/15/19 21:52	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/10/19 11:57	07/15/19 21:52	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,4-Dimethylphenol	4.6	J	9.6	3.3	ug/L		07/10/19 11:57	07/15/19 21:52	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		07/10/19 11:57	07/15/19 21:52	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/10/19 11:57	07/15/19 21:52	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/10/19 11:57	07/15/19 21:52	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/10/19 11:57	07/15/19 21:52	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/10/19 11:57	07/15/19 21:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/10/19 11:57	07/15/19 21:52	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/10/19 11:57	07/15/19 21:52	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		07/10/19 11:57	07/15/19 21:52	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/10/19 11:57	07/15/19 21:52	1
Indene	3.4	J	9.6	0.96	ug/L		07/10/19 11:57	07/15/19 21:52	1
Isophorone	ND		9.6	0.55	ug/L		07/10/19 11:57	07/15/19 21:52	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/10/19 11:57	07/15/19 21:52	1
3 & 4 Methylphenol	2.7	J	19	1.0	ug/L		07/10/19 11:57	07/15/19 21:52	1

Client Sample ID: MW7-ROX-070819
Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-7
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		07/10/19 11:57	07/15/19 21:52	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/10/19 11:57	07/15/19 21:52	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/10/19 11:57	07/15/19 21:52	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/10/19 11:57	07/15/19 21:52	1
2-Nitrophenol	ND		9.6	0.62	ug/L		07/10/19 11:57	07/15/19 21:52	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/10/19 11:57	07/15/19 21:52	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/10/19 11:57	07/15/19 21:52	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/10/19 11:57	07/15/19 21:52	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/10/19 11:57	07/15/19 21:52	1
Pentachlorophenol	ND		19	1.7	ug/L		07/10/19 11:57	07/15/19 21:52	1
Phenol	80	J	9.6	2.5	ug/L		07/10/19 11:57	07/15/19 21:52	1
Pyridine	ND		9.6	3.1	ug/L		07/10/19 11:57	07/15/19 21:52	1
Quinoline	ND		9.6	5.7	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/10/19 11:57	07/15/19 21:52	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/10/19 11:57	07/15/19 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*07/10/19 11:57*	*07/15/19 21:52*	*1*
2-Fluorophenol	*21*		*10 - 120*	*07/10/19 11:57*	*07/15/19 21:52*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*07/10/19 11:57*	*07/15/19 21:52*	*1*
Phenol-d5	*62*		*10 - 120*	*07/10/19 11:57*	*07/15/19 21:52*	*1*
Terphenyl-d14	*113*		*53 - 125*	*07/10/19 11:57*	*07/15/19 21:52*	*1*
2,4,6-Tribromophenol	*108*		*15 - 135*	*07/10/19 11:57*	*07/15/19 21:52*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0056	ug/L		07/16/19 12:15	07/16/19 19:50	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/16/19 12:15	07/16/19 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*07/16/19 12:15*	*07/16/19 19:50*	*1*

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

Job ID: 400-172762-1

Client Sample ID: MW7-ROX-070819-DUP
Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			07/16/19 19:07	1000
Acrolein	ND		20000	10000	ug/L			07/16/19 19:07	1000
Acrylonitrile	ND		10000	2800	ug/L			07/16/19 19:07	1000
Bromobenzene	ND		1000	540	ug/L			07/16/19 19:07	1000
Bromochloromethane	ND		1000	520	ug/L			07/16/19 19:07	1000
Bromodichloromethane	ND		1000	500	ug/L			07/16/19 19:07	1000
Bromoform	ND		5000	710	ug/L			07/16/19 19:07	1000
Bromomethane	ND		1000	980	ug/L			07/16/19 19:07	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			07/16/19 19:07	1000
Carbon disulfide	ND		1000	500	ug/L			07/16/19 19:07	1000
Carbon tetrachloride	ND		1000	500	ug/L			07/16/19 19:07	1000
Chlorobenzene	ND		1000	500	ug/L			07/16/19 19:07	1000
Dibromochloromethane	ND		1000	500	ug/L			07/16/19 19:07	1000
Chloroethane	ND		1000	760	ug/L			07/16/19 19:07	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			07/16/19 19:07	1000
Chloroform	ND		1000	600	ug/L			07/16/19 19:07	1000
1-Chlorohexane	ND		1000	700	ug/L			07/16/19 19:07	1000
Chloromethane	ND		1000	830	ug/L			07/16/19 19:07	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			07/16/19 19:07	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			07/16/19 19:07	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			07/16/19 19:07	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			07/16/19 19:07	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			07/16/19 19:07	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			07/16/19 19:07	1000
1,1-Dichloroethane	ND		1000	500	ug/L			07/16/19 19:07	1000
1,2-Dichloroethane	ND		1000	500	ug/L			07/16/19 19:07	1000
1,1-Dichloroethene	ND		1000	500	ug/L			07/16/19 19:07	1000
1,2-Dichloropropane	ND		1000	500	ug/L			07/16/19 19:07	1000
1,3-Dichloropropane	ND		1000	500	ug/L			07/16/19 19:07	1000
2,2-Dichloropropane	ND		1000	500	ug/L			07/16/19 19:07	1000
1,1-Dichloropropene	ND		1000	500	ug/L			07/16/19 19:07	1000
Ethylbenzene	ND		1000	500	ug/L			07/16/19 19:07	1000
Ethyl methacrylate	ND		1000	600	ug/L			07/16/19 19:07	1000
Hexachlorobutadiene	ND		5000	900	ug/L			07/16/19 19:07	1000
2-Hexanone	ND	*	25000	3100	ug/L			07/16/19 19:07	1000
Isopropylbenzene	ND		1000	530	ug/L			07/16/19 19:07	1000
Methylene bromide	ND		5000	590	ug/L			07/16/19 19:07	1000
Methylene Chloride	ND		5000	3000	ug/L			07/16/19 19:07	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			07/16/19 19:07	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			07/16/19 19:07	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			07/16/19 19:07	1000
Naphthalene	ND		1000	1000	ug/L			07/16/19 19:07	1000
n-Butylbenzene	ND		1000	760	ug/L			07/16/19 19:07	1000
N-Propylbenzene	ND		1000	690	ug/L			07/16/19 19:07	1000
o-Chlorotoluene	ND		1000	570	ug/L			07/16/19 19:07	1000
o-Xylene	ND		5000	600	ug/L			07/16/19 19:07	1000
p-Chlorotoluene	ND		1000	560	ug/L			07/16/19 19:07	1000
p-Isopropyltoluene	ND		1000	710	ug/L			07/16/19 19:07	1000
sec-Butylbenzene	ND		1000	700	ug/L			07/16/19 19:07	1000

Client Sample ID: MW7-ROX-070819-DUP

Lab Sample ID: 400-172762-8

Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1000	1000	ug/L			07/16/19 19:07	1000
tert-Butylbenzene	ND		1000	630	ug/L			07/16/19 19:07	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			07/16/19 19:07	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			07/16/19 19:07	1000
Tetrachloroethene	ND		1000	580	ug/L			07/16/19 19:07	1000
Toluene	1500		1000	410	ug/L			07/16/19 19:07	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			07/16/19 19:07	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			07/16/19 19:07	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			07/16/19 19:07	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			07/16/19 19:07	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			07/16/19 19:07	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			07/16/19 19:07	1000
Trichloroethene	ND		1000	500	ug/L			07/16/19 19:07	1000
Trichlorofluoromethane	ND		1000	520	ug/L			07/16/19 19:07	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			07/16/19 19:07	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			07/16/19 19:07	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			07/16/19 19:07	1000
Vinyl acetate	ND		25000	2000	ug/L			07/16/19 19:07	1000
Vinyl chloride	ND		1000	500	ug/L			07/16/19 19:07	1000
Xylenes, Total	ND		10000	1600	ug/L			07/16/19 19:07	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/16/19 19:07*	*1000*
Dibromofluoromethane	*98*		*81 - 121*		*07/16/19 19:07*	*1000*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 19:07*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1400000		5000	1900	ug/L			07/17/19 18:08	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/17/19 18:08*	*5000*
Dibromofluoromethane	*97*		*81 - 121*		*07/17/19 18:08*	*5000*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/17/19 18:08*	*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		07/10/19 11:57	07/15/19 19:52	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:52	1
Anthracene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:52	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Chrysene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1
Fluoranthene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:52	1
Fluorene	ND		0.19	0.020	ug/L		07/10/19 11:57	07/15/19 19:52	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/10/19 11:57	07/15/19 19:52	1

Client Sample ID: MW7-ROX-070819-DUP

Lab Sample ID: 400-172762-8

Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

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		07/10/19 11:57	07/15/19 19:52	1
Pyrene	ND		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:52	1
1-Methylnaphthalene	2.7		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:52	1
2-Methylnaphthalene	4.2		0.19	0.019	ug/L		07/10/19 11:57	07/15/19 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*33 - 138*	*07/10/19 11:57*	*07/15/19 19:52*	*1*
2-Fluorobiphenyl	*66*		*15 - 122*	*07/10/19 11:57*	*07/15/19 19:52*	*1*
Nitrobenzene-d5	*68*		*19 - 130*	*07/10/19 11:57*	*07/15/19 19:52*	*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		07/10/19 11:57	07/15/19 22:13	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		07/10/19 11:57	07/15/19 22:13	1
Benzoic acid	15	J	29	7.0	ug/L		07/10/19 11:57	07/15/19 22:13	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/10/19 11:57	07/15/19 22:13	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/10/19 11:57	07/15/19 22:13	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/10/19 11:57	07/15/19 22:13	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		07/10/19 11:57	07/15/19 22:13	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/10/19 11:57	07/15/19 22:13	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/10/19 11:57	07/15/19 22:13	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/10/19 11:57	07/15/19 22:13	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/10/19 11:57	07/15/19 22:13	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/10/19 11:57	07/15/19 22:13	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/10/19 11:57	07/15/19 22:13	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/10/19 11:57	07/15/19 22:13	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/10/19 11:57	07/15/19 22:13	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/10/19 11:57	07/15/19 22:13	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/10/19 11:57	07/15/19 22:13	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/10/19 11:57	07/15/19 22:13	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,4-Dimethylphenol	4.4	J	9.6	3.3	ug/L		07/10/19 11:57	07/15/19 22:13	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		07/10/19 11:57	07/15/19 22:13	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/10/19 11:57	07/15/19 22:13	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/10/19 11:57	07/15/19 22:13	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/10/19 11:57	07/15/19 22:13	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/10/19 11:57	07/15/19 22:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/10/19 11:57	07/15/19 22:13	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/10/19 11:57	07/15/19 22:13	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		07/10/19 11:57	07/15/19 22:13	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/10/19 11:57	07/15/19 22:13	1
Indene	3.8	J	9.6	0.96	ug/L		07/10/19 11:57	07/15/19 22:13	1
Isophorone	ND		9.6	0.55	ug/L		07/10/19 11:57	07/15/19 22:13	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/10/19 11:57	07/15/19 22:13	1
3 & 4 Methylphenol	2.8	J	19	1.0	ug/L		07/10/19 11:57	07/15/19 22:13	1

Client Sample ID: MW7-ROX-070819-DUP
Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-8
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		07/10/19 11:57	07/15/19 22:13	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/10/19 11:57	07/15/19 22:13	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/10/19 11:57	07/15/19 22:13	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/10/19 11:57	07/15/19 22:13	1
2-Nitrophenol	ND		9.6	0.62	ug/L		07/10/19 11:57	07/15/19 22:13	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/10/19 11:57	07/15/19 22:13	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/10/19 11:57	07/15/19 22:13	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/10/19 11:57	07/15/19 22:13	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/10/19 11:57	07/15/19 22:13	1
Pentachlorophenol	ND		19	1.7	ug/L		07/10/19 11:57	07/15/19 22:13	1
Phenol	49	J	9.6	2.5	ug/L		07/10/19 11:57	07/15/19 22:13	1
Pyridine	ND		9.6	3.1	ug/L		07/10/19 11:57	07/15/19 22:13	1
Quinoline	ND		9.6	5.7	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/10/19 11:57	07/15/19 22:13	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/10/19 11:57	07/15/19 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*34 - 120*	*07/10/19 11:57*	*07/15/19 22:13*	*1*
2-Fluorophenol	*24*		*10 - 120*	*07/10/19 11:57*	*07/15/19 22:13*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*07/10/19 11:57*	*07/15/19 22:13*	*1*
Phenol-d5	*68*		*10 - 120*	*07/10/19 11:57*	*07/15/19 22:13*	*1*
Terphenyl-d14	*87*		*53 - 125*	*07/10/19 11:57*	*07/15/19 22:13*	*1*
2,4,6-Tribromophenol	*106*		*15 - 135*	*07/10/19 11:57*	*07/15/19 22:13*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		07/16/19 12:15	07/16/19 20:13	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		07/16/19 12:15	07/16/19 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*07/16/19 12:15*	*07/16/19 20:13*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the 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

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: 400-172762-1

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)
400-172762-1	TB-ROX-070819-8260	101	100	103
400-172762-3	MW4-ROX-070819-EB	102	101	102
400-172762-4	MW4-ROX-070819	102	98	102
400-172762-5	MW25-ROX-070819	100	98	102
400-172762-6	MW8-ROX-070819	101	97	103
400-172762-6 - DL	MW8-ROX-070819	100	99	102
400-172762-7	MW7-ROX-070819	102	97	102
400-172762-7 - DL	MW7-ROX-070819	101	97	101
400-172762-8	MW7-ROX-070819-DUP	101	98	103
400-172762-8 - DL	MW7-ROX-070819-DUP	101	97	102
LCS 400-448145/1002	Lab Control Sample	96	100	102
LCS 400-448326/1002	Lab Control Sample	98	98	101
MB 400-448145/4	Method Blank	102	99	103
MB 400-448326/4	Method Blank	99	100	102

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)
400-172762-3	MW4-ROX-070819-EB	78	73	95	91	103	87
400-172762-4	MW4-ROX-070819	76	55	90	78	90	98
400-172762-5	MW25-ROX-070819	72	65	94	84	95	93
400-172762-6	MW8-ROX-070819	62	23	72	49	80	96
400-172762-7	MW7-ROX-070819	68	21	84	62	113	108
400-172762-8	MW7-ROX-070819-DUP	61	24	78	68	87	106
LCS 400-447399/2-A	Lab Control Sample	64	60	80	73	84	87
LCS 400-447399/4-A	Lab Control Sample	69	0.2 X	82	2 X	92	0 X
LCS 400-447763/20-A	Lab Control Sample	79	50	100	81	96	57
LCSD 400-447399/3-A	Lab Control Sample Dup	70	58	86	76	88	92
LCSD 400-447399/5-A	Lab Control Sample Dup	63	53	73	68	86	57
LCSD 400-447763/21-A	Lab Control Sample Dup	80	10	101	16	94	18
LCSD 400-447763/3-A	Lab Control Sample Dup	81	72	103	93	96	95
MB 400-447399/1-A	Method Blank	68	67	86	80	95	76
MB 400-447763/1-A	Method Blank	101	86	121 X	108	123	101

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-172762-1

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)
400-172762-3	MW4-ROX-070819-EB	127	95	87
400-172762-4	MW4-ROX-070819	106	79	69
400-172762-5	MW25-ROX-070819	97	79	81
400-172762-6	MW8-ROX-070819	80	52	51
400-172762-7	MW7-ROX-070819	84	71	81
400-172762-8	MW7-ROX-070819-DUP	80	66	68
LCS 400-447399/2-A	Lab Control Sample	87	69	68
LCS 400-447763/2-A	Lab Control Sample	83	77	60
LCSD 400-447399/3-A	Lab Control Sample Dup	91	73	75
LCSD 400-447763/3-A	Lab Control Sample Dup	81	77	62
MB 400-447399/1-A	Method Blank	131	86	91
MB 400-447763/1-A	Method Blank	155 X	113	89

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)
400-172762-2	TB-ROX-070819-8011	114
400-172762-3	MW4-ROX-070819-EB	101
400-172762-4	MW4-ROX-070819	103
400-172762-5	MW25-ROX-070819	103
400-172762-6	MW8-ROX-070819	107
400-172762-7	MW7-ROX-070819	103
400-172762-8	MW7-ROX-070819-DUP	114
LCS 400-448201/2-A	Lab Control Sample	102
MB 400-448201/1-A	Method Blank	115

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-172762-1

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: 400-172762-1

Client Sample ID: TB-ROX-070819-8260

Date Collected: 07/08/19 00:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 13:49	RS	TAL PEN

Client Sample ID: TB-ROX-070819-8011

Date Collected: 07/08/19 00:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.6 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 17:56	DS	TAL PEN

Client Sample ID: MW4-ROX-070819-EB

Date Collected: 07/08/19 10:45
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 14:16	RS	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	447399	07/10/19 16:16	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 20:48	VC1	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	447399	07/10/19 16:16	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448058	07/15/19 18:44	KJA	TAL PEN
Total/NA	Prep	8011			34.2 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 18:19	DS	TAL PEN

Client Sample ID: MW4-ROX-070819

Date Collected: 07/08/19 11:20
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-4
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	448145	07/16/19 17:22	RS	TAL PEN
Total/NA	Prep	3520C			994 mL	1 mL	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 19:12	VC1	TAL PEN
Total/NA	Prep	3520C			994 mL	1 mL	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448527	07/19/19 01:23	KJA	TAL PEN
Total/NA	Prep	8011			36.2 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 18:42	DS	TAL PEN

Client Sample ID: MW25-ROX-070819

Date Collected: 07/08/19 12:00
Date Received: 07/09/19 08:53

Lab Sample ID: 400-172762-5
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	448145	07/16/19 17:48	RS	TAL PEN
Total/NA	Prep	3520C			947.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 21:09	VC1	TAL PEN

Client Sample ID: MW25-ROX-070819

Lab Sample ID: 400-172762-5
Matrix: Water

Date Collected: 07/08/19 12:00
Date Received: 07/09/19 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			947.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448058	07/15/19 19:01	KJA	TAL PEN
Total/NA	Prep	8011			36.5 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 19:05	DS	TAL PEN

Client Sample ID: MW8-ROX-070819

Lab Sample ID: 400-172762-6
Matrix: Water

Date Collected: 07/08/19 13:05
Date Received: 07/09/19 08:53

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	448145	07/16/19 18:15	RS	TAL PEN
Total/NA	Analysis	8260B	DL	2000	5 mL	5 mL	448326	07/17/19 17:15	WPD	TAL PEN
Total/NA	Prep	3520C			990.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 21:30	VC1	TAL PEN
Total/NA	Prep	3520C	DL		990.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D	DL	5			448221	07/16/19 23:53	VC1	TAL PEN
Total/NA	Prep	3520C			990.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448058	07/15/19 19:18	KJA	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 19:28	DS	TAL PEN

Client Sample ID: MW7-ROX-070819

Lab Sample ID: 400-172762-7
Matrix: Water

Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	448145	07/16/19 18:41	RS	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	448326	07/17/19 17:41	WPD	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 21:52	VC1	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448058	07/15/19 19:35	KJA	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 19:50	DS	TAL PEN

Client Sample ID: MW7-ROX-070819-DUP

Lab Sample ID: 400-172762-8
Matrix: Water

Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	448145	07/16/19 19:07	RS	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	448326	07/17/19 18:08	WPD	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 22:13	VC1	TAL PEN

Client Sample ID: MW7-ROX-070819-DUP

Lab Sample ID: 400-172762-8
Matrix: Water

Date Collected: 07/08/19 13:55
Date Received: 07/09/19 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1045.2 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448058	07/15/19 19:52	KJA	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 20:13	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-447399/1-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	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 17:14	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448058	07/15/19 16:10	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-447763/1-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	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 16:43	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448495	07/18/19 12:50	S1S	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448145/4
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	448145	07/16/19 08:58	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448201/1-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	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 17:11	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448326/4
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	448326	07/17/19 09:04	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-447399/2-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	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 17:36	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			448058	07/15/19 16:27	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-447399/4-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	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	448057	07/15/19 18:19	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-447763/20-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	447763	07/12/19 14:44	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 17:47	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-447763/2-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	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			448495	07/18/19 13:07	S1S	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448145/1002

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	448145	07/16/19 07:58	RS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448201/2-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	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 17:33	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-172762-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448326/1002

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	448326	07/17/19 08:14	WPD	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-447399/3-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	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 17:57	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			448058	07/15/19 16:44	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-447399/5-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	447399	07/10/19 11:57	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448057	07/15/19 18:40	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-447763/21-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	447763	07/12/19 14:44	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 18:08	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-447763/3-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	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 17:26	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	447763	07/12/19 14:17	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			448495	07/18/19 13:24	S1S	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: 400-172762-1

GC/MS VOA

Analysis Batch: 448145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-1	TB-ROX-070819-8260	Total/NA	Water	8260B	
400-172762-3	MW4-ROX-070819-EB	Total/NA	Water	8260B	
400-172762-4	MW4-ROX-070819	Total/NA	Water	8260B	
400-172762-5	MW25-ROX-070819	Total/NA	Water	8260B	
400-172762-6	MW8-ROX-070819	Total/NA	Water	8260B	
400-172762-7	MW7-ROX-070819	Total/NA	Water	8260B	
400-172762-8	MW7-ROX-070819-DUP	Total/NA	Water	8260B	
MB 400-448145/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448145/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 448326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-6 - DL	MW8-ROX-070819	Total/NA	Water	8260B	
400-172762-7 - DL	MW7-ROX-070819	Total/NA	Water	8260B	
400-172762-8 - DL	MW7-ROX-070819-DUP	Total/NA	Water	8260B	
MB 400-448326/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448326/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 447399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-3	MW4-ROX-070819-EB	Total/NA	Water	3520C	
400-172762-5	MW25-ROX-070819	Total/NA	Water	3520C	
400-172762-6	MW8-ROX-070819	Total/NA	Water	3520C	
400-172762-6 - DL	MW8-ROX-070819	Total/NA	Water	3520C	
400-172762-7	MW7-ROX-070819	Total/NA	Water	3520C	
400-172762-8	MW7-ROX-070819-DUP	Total/NA	Water	3520C	
MB 400-447399/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-447399/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-447399/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-447399/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-447399/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 447763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-4	MW4-ROX-070819	Total/NA	Water	3520C	
MB 400-447763/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-447763/20-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-447763/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-447763/21-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-447763/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 448057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-3	MW4-ROX-070819-EB	Total/NA	Water	8270D	447399
400-172762-5	MW25-ROX-070819	Total/NA	Water	8270D	447399
400-172762-6	MW8-ROX-070819	Total/NA	Water	8270D	447399
400-172762-7	MW7-ROX-070819	Total/NA	Water	8270D	447399
400-172762-8	MW7-ROX-070819-DUP	Total/NA	Water	8270D	447399
MB 400-447399/1-A	Method Blank	Total/NA	Water	8270D	447399

GC/MS Semi VOA (Continued)

Analysis Batch: 448057 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-447399/2-A	Lab Control Sample	Total/NA	Water	8270D	447399
LCS 400-447399/4-A	Lab Control Sample	Total/NA	Water	8270D	447399
LCSD 400-447399/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	447399
LCSD 400-447399/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	447399

Analysis Batch: 448058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-3	MW4-ROX-070819-EB	Total/NA	Water	8270D LL	447399
400-172762-5	MW25-ROX-070819	Total/NA	Water	8270D LL	447399
400-172762-6	MW8-ROX-070819	Total/NA	Water	8270D LL	447399
400-172762-7	MW7-ROX-070819	Total/NA	Water	8270D LL	447399
400-172762-8	MW7-ROX-070819-DUP	Total/NA	Water	8270D LL	447399
MB 400-447399/1-A	Method Blank	Total/NA	Water	8270D LL	447399
LCS 400-447399/2-A	Lab Control Sample	Total/NA	Water	8270D LL	447399
LCSD 400-447399/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	447399

Analysis Batch: 448221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-6 - DL	MW8-ROX-070819	Total/NA	Water	8270D	447399

Analysis Batch: 448495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-447763/1-A	Method Blank	Total/NA	Water	8270D LL	447763
LCS 400-447763/2-A	Lab Control Sample	Total/NA	Water	8270D LL	447763
LCSD 400-447763/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	447763

Analysis Batch: 448527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-4	MW4-ROX-070819	Total/NA	Water	8270D LL	447763

Analysis Batch: 448576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-4	MW4-ROX-070819	Total/NA	Water	8270D	447763
MB 400-447763/1-A	Method Blank	Total/NA	Water	8270D	447763
LCS 400-447763/20-A	Lab Control Sample	Total/NA	Water	8270D	447763
LCSD 400-447763/21-A	Lab Control Sample Dup	Total/NA	Water	8270D	447763
LCSD 400-447763/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	447763

GC Semi VOA

Prep Batch: 448201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-2	TB-ROX-070819-8011	Total/NA	Water	8011	
400-172762-3	MW4-ROX-070819-EB	Total/NA	Water	8011	
400-172762-4	MW4-ROX-070819	Total/NA	Water	8011	
400-172762-5	MW25-ROX-070819	Total/NA	Water	8011	
400-172762-6	MW8-ROX-070819	Total/NA	Water	8011	
400-172762-7	MW7-ROX-070819	Total/NA	Water	8011	
400-172762-8	MW7-ROX-070819-DUP	Total/NA	Water	8011	
MB 400-448201/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448201/2-A	Lab Control Sample	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-172762-1

GC Semi VOA

Analysis Batch: 448291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172762-2	TB-ROX-070819-8011	Total/NA	Water	8011	448201
400-172762-3	MW4-ROX-070819-EB	Total/NA	Water	8011	448201
400-172762-4	MW4-ROX-070819	Total/NA	Water	8011	448201
400-172762-5	MW25-ROX-070819	Total/NA	Water	8011	448201
400-172762-6	MW8-ROX-070819	Total/NA	Water	8011	448201
400-172762-7	MW7-ROX-070819	Total/NA	Water	8011	448201
400-172762-8	MW7-ROX-070819-DUP	Total/NA	Water	8011	448201
MB 400-448201/1-A	Method Blank	Total/NA	Water	8011	448201
LCS 400-448201/2-A	Lab Control Sample	Total/NA	Water	8011	448201

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

Lab Sample ID: MB 400-448145/4
Matrix: Water
Analysis Batch: 448145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/19 08:58	1
Acrolein	ND		20	10	ug/L			07/16/19 08:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 08:58	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 08:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 08:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 08:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 08:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 08:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 08:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 08:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 08:58	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 08:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 08:58	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 08:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 08:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 08:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 08:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 08:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 08:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 08:58	1
2-Hexanone	ND		25	3.1	ug/L			07/16/19 08:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 08:58	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 08:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 08:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 08:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 08:58	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 08:58	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 08:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 08:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 08:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 08:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 08:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 08:58	1

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

Lab Sample ID: MB 400-448145/4
Matrix: Water
Analysis Batch: 448145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 08:58	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/19 08:58	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 08:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 08:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 08:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 08:58	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 08:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 08:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 08:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 08:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 08:58	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 08:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 08:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 08:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 08:58	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 08:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 08:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*07/16/19 08:58*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/16/19 08:58*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 08:58*	*1*

Lab Sample ID: LCS 400-448145/1002
Matrix: Water
Analysis Batch: 448145

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	293		ug/L		146	43 - 160
Acrolein	500	603		ug/L		121	38 - 160
Acrylonitrile	500	560		ug/L		112	64 - 142
Benzene	50.0	50.0		ug/L		100	70 - 130
Bromobenzene	50.0	49.2		ug/L		98	70 - 132
Bromochloromethane	50.0	51.7		ug/L		103	70 - 130
Bromodichloromethane	50.0	51.9		ug/L		104	67 - 133
Bromoform	50.0	57.9		ug/L		116	57 - 140
Bromomethane	50.0	36.4		ug/L		73	10 - 160
2-Butanone (MEK)	200	250		ug/L		125	61 - 145
Carbon disulfide	50.0	50.2		ug/L		100	61 - 137
Carbon tetrachloride	50.0	56.9		ug/L		114	61 - 137
Chlorobenzene	50.0	52.1		ug/L		104	70 - 130
Dibromochloromethane	50.0	57.6		ug/L		115	67 - 135
Chloroethane	50.0	45.7		ug/L		91	55 - 141

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

Lab Sample ID: LCS 400-448145/1002
Matrix: Water
Analysis Batch: 448145

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	39.5		ug/L		79	10 - 160
Chloroform	50.0	51.2		ug/L		102	69 - 130
1-Chlorohexane	50.0	56.6		ug/L		113	69 - 130
Chloromethane	50.0	41.6		ug/L		83	58 - 137
cis-1,2-Dichloroethene	50.0	53.4		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	54.8		ug/L		110	69 - 132
1,2-Dichlorobenzene	50.0	53.2		ug/L		106	67 - 130
1,3-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
1,4-Dichlorobenzene	50.0	52.1		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	27.4		ug/L		55	41 - 146
1,1-Dichloroethane	50.0	53.5		ug/L		107	70 - 130
1,2-Dichloroethane	50.0	51.8		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	47.2		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	52.5		ug/L		105	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	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	53.5		ug/L		107	70 - 130
Ethyl methacrylate	50.0	59.3		ug/L		119	68 - 130
Hexachlorobutadiene	50.0	49.1		ug/L		98	53 - 140
2-Hexanone	200	280	*	ug/L		140	65 - 137
Isopropylbenzene	50.0	50.9		ug/L		102	70 - 130
Methylene bromide	50.0	46.8		ug/L		94	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	238		ug/L		119	69 - 138
Methyl tert-butyl ether	50.0	47.2		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	52.4		ug/L		105	70 - 130
Naphthalene	50.0	51.4		ug/L		103	47 - 149
n-Butylbenzene	50.0	53.1		ug/L		106	67 - 130
N-Propylbenzene	50.0	53.2		ug/L		106	70 - 130
o-Chlorotoluene	50.0	52.0		ug/L		104	70 - 130
o-Xylene	50.0	52.0		ug/L		104	70 - 130
p-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
p-Isopropyltoluene	50.0	52.8		ug/L		106	65 - 130
sec-Butylbenzene	50.0	51.0		ug/L		102	66 - 130
Styrene	50.0	49.8		ug/L		100	70 - 130
tert-Butylbenzene	50.0	50.8		ug/L		102	64 - 139
1,1,1,2-Tetrachloroethane	50.0	63.2		ug/L		126	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	70 - 131
Tetrachloroethene	50.0	52.2		ug/L		104	65 - 130
Toluene	50.0	53.5		ug/L		107	70 - 130
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	59.9		ug/L		120	63 - 130
1,2,3-Trichlorobenzene	50.0	50.4		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 140
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	52.8		ug/L		106	70 - 130
Trichloroethene	50.0	50.7		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	40.5		ug/L		81	65 - 138

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

Lab Sample ID: LCS 400-448145/1002
Matrix: Water
Analysis Batch: 448145

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	49.0		ug/L		98	70 - 130
1,2,4-Trimethylbenzene	50.0	50.6		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	50.0	50.4		ug/L		101	69 - 130
Vinyl acetate	100	104		ug/L		104	26 - 160
Vinyl chloride	50.0	41.8		ug/L		84	59 - 136
Xylenes, Total	100	104		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*100*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 400-448326/4
Matrix: Water
Analysis Batch: 448326

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/17/19 09:04	1
Acrolein	ND		20	10	ug/L			07/17/19 09:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 09:04	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 09:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 09:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 09:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 09:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 09:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 09:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 09:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 09:04	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 09:04	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 09:04	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 09:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 09:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 09:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 09:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 09:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 09:04	1

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

Lab Sample ID: MB 400-448326/4
Matrix: Water
Analysis Batch: 448326

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 09:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 09:04	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 09:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 09:04	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 09:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 09:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 09:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 09:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 09:04	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 09:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 09:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 09:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 09:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 09:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 09:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 09:04	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/19 09:04	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 09:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 09:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 09:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 09:04	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 09:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 09:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 09:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 09:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 09:04	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 09:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 09:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 09:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 09:04	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 09:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 09:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*07/17/19 09:04*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*07/17/19 09:04*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/17/19 09:04*	*1*

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

Lab Sample ID: LCS 400-448326/1002
Matrix: Water
Analysis Batch: 448326

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	55.2		ug/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 400-447399/1-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/10/19 11:57	07/15/19 17:14	1
Benzenethiol	ND		10	1.7	ug/L		07/10/19 11:57	07/15/19 17:14	1
Benzoic acid	ND		30	7.3	ug/L		07/10/19 11:57	07/15/19 17:14	1
Benzyl alcohol	ND		10	2.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/10/19 11:57	07/15/19 17:14	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/10/19 11:57	07/15/19 17:14	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/10/19 11:57	07/15/19 17:14	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/10/19 11:57	07/15/19 17:14	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/10/19 11:57	07/15/19 17:14	1
4-Chloroaniline	ND		10	3.4	ug/L		07/10/19 11:57	07/15/19 17:14	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/10/19 11:57	07/15/19 17:14	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/10/19 11:57	07/15/19 17:14	1
2-Chlorophenol	ND		10	2.2	ug/L		07/10/19 11:57	07/15/19 17:14	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
Dibenzofuran	ND		10	0.52	ug/L		07/10/19 11:57	07/15/19 17:14	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
Diethyl phthalate	ND		10	0.70	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/10/19 11:57	07/15/19 17:14	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/10/19 11:57	07/15/19 17:14	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/10/19 11:57	07/15/19 17:14	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/10/19 11:57	07/15/19 17:14	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/10/19 11:57	07/15/19 17:14	1
1,4-Dioxane	ND		10	1.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/10/19 11:57	07/15/19 17:14	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/10/19 11:57	07/15/19 17:14	1
Hexachloroethane	ND		10	4.2	ug/L		07/10/19 11:57	07/15/19 17:14	1
Indene	ND		10	1.0	ug/L		07/10/19 11:57	07/15/19 17:14	1

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

Lab Sample ID: MB 400-447399/1-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		10	0.57	ug/L		07/10/19 11:57	07/15/19 17:14	1
2-Methylphenol	ND		10	1.8	ug/L		07/10/19 11:57	07/15/19 17:14	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
2-Nitroaniline	ND		10	2.2	ug/L		07/10/19 11:57	07/15/19 17:14	1
3-Nitroaniline	ND		10	1.8	ug/L		07/10/19 11:57	07/15/19 17:14	1
4-Nitroaniline	ND		10	2.5	ug/L		07/10/19 11:57	07/15/19 17:14	1
Nitrobenzene	ND		10	0.55	ug/L		07/10/19 11:57	07/15/19 17:14	1
2-Nitrophenol	ND		10	0.65	ug/L		07/10/19 11:57	07/15/19 17:14	1
4-Nitrophenol	ND		10	2.1	ug/L		07/10/19 11:57	07/15/19 17:14	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/10/19 11:57	07/15/19 17:14	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/10/19 11:57	07/15/19 17:14	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/10/19 11:57	07/15/19 17:14	1
Pentachlorophenol	ND		20	1.8	ug/L		07/10/19 11:57	07/15/19 17:14	1
Phenol	ND		10	2.6	ug/L		07/10/19 11:57	07/15/19 17:14	1
Pyridine	ND		10	3.2	ug/L		07/10/19 11:57	07/15/19 17:14	1
Quinoline	ND		10	6.0	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/10/19 11:57	07/15/19 17:14	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/10/19 11:57	07/15/19 17:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*07/10/19 11:57*	*07/15/19 17:14*	*1*
2-Fluorophenol	*67*		*10 - 120*	*07/10/19 11:57*	*07/15/19 17:14*	*1*
Nitrobenzene-d5	*86*		*27 - 120*	*07/10/19 11:57*	*07/15/19 17:14*	*1*
Phenol-d5	*80*		*10 - 120*	*07/10/19 11:57*	*07/15/19 17:14*	*1*
Terphenyl-d14	*95*		*53 - 125*	*07/10/19 11:57*	*07/15/19 17:14*	*1*
2,4,6-Tribromophenol	*76*		*15 - 135*	*07/10/19 11:57*	*07/15/19 17:14*	*1*

Lab Sample ID: LCS 400-447399/2-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	21.5		ug/L		72	29 - 120
Benzoic acid	117	51.8		ug/L		44	10 - 150
Benzyl alcohol	30.0	21.3		ug/L		71	19 - 125
Bis(2-chloroethoxy)methane	30.0	17.3		ug/L		58	45 - 120
Bis(2-chloroethyl)ether	30.0	15.7		ug/L		52	48 - 120
bis (2-chloroisopropyl) ether	30.0	18.6		ug/L		62	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	22.0		ug/L		73	48 - 150
4-Bromophenyl phenyl ether	30.0	19.8		ug/L		66	55 - 122
Butyl benzyl phthalate	30.0	21.9		ug/L		73	46 - 145
4-Chloroaniline	30.0	18.7		ug/L		62	30 - 120
4-Chloro-3-methylphenol	30.0	24.0		ug/L		80	39 - 140
2-Chloronaphthalene	30.0	18.6		ug/L		62	52 - 120
2-Chlorophenol	30.0	19.9		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	19.1		ug/L		64	58 - 124
Dibenz[a,h]acridine	30.0	16.2		ug/L		54	46 - 149
Dibenzofuran	30.0	19.9		ug/L		66	58 - 123

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

Lab Sample ID: LCS 400-447399/2-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	40.0	45.2		ug/L		113	39 - 135
2,4-Dichlorophenol	30.0	21.4		ug/L		71	39 - 128
Diethyl phthalate	30.0	21.0		ug/L		70	44 - 146
2,4-Dimethylphenol	30.0	20.8		ug/L		69	44 - 120
Dimethyl phthalate	30.0	20.4		ug/L		68	50 - 131
Di-n-butyl phthalate	30.0	23.2		ug/L		77	55 - 131
4,6-Dinitro-ortho-cresol	60.0	51.4		ug/L		86	10 - 150
2,4-Dinitrophenol	60.0	58.3		ug/L		97	10 - 150
2,4-Dinitrotoluene	30.0	22.4		ug/L		75	58 - 140
2,6-Dinitrotoluene	30.0	21.4		ug/L		71	57 - 130
Di-n-octyl phthalate	30.0	20.5		ug/L		68	50 - 150
1,4-Dioxane	30.0	12.4		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.2		ug/L		67	47 - 123
Hexachlorobenzene	30.0	19.3		ug/L		64	52 - 131
Hexachlorocyclopentadiene	30.0	10.3	J	ug/L		34	10 - 129
Hexachloroethane	30.0	13.3		ug/L		44	41 - 120
Indene	30.0	18.0		ug/L		60	47 - 120
Isophorone	30.0	19.7		ug/L		66	49 - 120
2-Methylphenol	30.0	20.6		ug/L		69	39 - 123
3 & 4 Methylphenol	30.0	19.7	J	ug/L		66	38 - 121
2-Nitroaniline	30.0	22.9		ug/L		76	47 - 150
3-Nitroaniline	30.0	22.3		ug/L		74	34 - 132
4-Nitroaniline	30.0	24.8		ug/L		83	41 - 135
Nitrobenzene	30.0	20.0		ug/L		67	47 - 120
2-Nitrophenol	30.0	22.2		ug/L		74	28 - 136
4-Nitrophenol	60.0	40.0		ug/L		67	10 - 150
N-Nitrosodimethylamine	30.0	20.5		ug/L		68	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.7		ug/L		66	44 - 120
N-Nitrosodiphenylamine	29.8	21.0		ug/L		70	56 - 120
Pentachlorophenol	60.0	42.4		ug/L		71	15 - 141
Phenol	30.0	18.4		ug/L		61	33 - 120
Pyridine	60.0	31.4		ug/L		52	26 - 120
Quinoline	30.0	24.3		ug/L		81	51 - 129
2,4,5-Trichlorophenol	30.0	21.8		ug/L		73	38 - 147
2,4,6-Trichlorophenol	30.0	21.5		ug/L		72	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*34 - 120*
2-Fluorophenol	*60*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*73*		*10 - 120*
Terphenyl-d14	*84*		*53 - 125*
2,4,6-Tribromophenol	*87*		*15 - 135*

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

Lab Sample ID: LCS 400-447399/4-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447399

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	69		34 - 120
2-Fluorophenol	0.2	X	10 - 120
Nitrobenzene-d5	82		27 - 120
Phenol-d5	2	X	10 - 120
Terphenyl-d14	92		53 - 125
2,4,6-Tribromophenol	0	X	15 - 135

Lab Sample ID: LCSD 400-447399/3-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	22.5		ug/L		75	29 - 120	4	30
Benzoic acid	117	56.0		ug/L		48	10 - 150	8	30
Benzyl alcohol	30.0	21.8		ug/L		73	19 - 125	2	30
Bis(2-chloroethoxy)methane	30.0	17.4		ug/L		58	45 - 120	1	30
Bis(2-chloroethyl)ether	30.0	17.0		ug/L		57	48 - 120	8	30
bis (2-chloroisopropyl) ether	30.0	19.1		ug/L		64	30 - 125	3	30
Bis(2-ethylhexyl) phthalate	30.0	24.0		ug/L		80	48 - 150	8	30
4-Bromophenyl phenyl ether	30.0	20.3		ug/L		68	55 - 122	2	30
Butyl benzyl phthalate	30.0	22.8		ug/L		76	46 - 145	4	30
4-Chloroaniline	30.0	17.1		ug/L		57	30 - 120	9	30
4-Chloro-3-methylphenol	30.0	23.4		ug/L		78	39 - 140	2	30
2-Chloronaphthalene	30.0	19.6		ug/L		65	52 - 120	5	30
2-Chlorophenol	30.0	19.7		ug/L		66	34 - 120	1	30
4-Chlorophenyl phenyl ether	30.0	19.9		ug/L		66	58 - 124	4	30
Dibenz[a,h]acridine	30.0	21.3		ug/L		71	46 - 149	27	30
Dibenzofuran	30.0	20.2		ug/L		67	58 - 123	2	30
3,3'-Dichlorobenzidine	40.0	42.3		ug/L		106	39 - 135	7	30
2,4-Dichlorophenol	30.0	21.6		ug/L		72	39 - 128	1	30
Diethyl phthalate	30.0	21.2		ug/L		71	44 - 146	1	30
2,4-Dimethylphenol	30.0	20.8		ug/L		69	44 - 120	0	30
Dimethyl phthalate	30.0	20.4		ug/L		68	50 - 131	0	30
Di-n-butyl phthalate	30.0	24.4		ug/L		81	55 - 131	5	30
4,6-Dinitro-ortho-cresol	60.0	50.4		ug/L		84	10 - 150	2	30
2,4-Dinitrophenol	60.0	56.2		ug/L		94	10 - 150	4	30
2,4-Dinitrotoluene	30.0	22.5		ug/L		75	58 - 140	1	30
2,6-Dinitrotoluene	30.0	21.2		ug/L		71	57 - 130	1	30
Di-n-octyl phthalate	30.0	22.6		ug/L		75	50 - 150	10	30
1,4-Dioxane	30.0	13.3		ug/L		44	25 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	19.9		ug/L		66	47 - 123	1	30
Hexachlorobenzene	30.0	20.8		ug/L		69	52 - 131	7	30
Hexachlorocyclopentadiene	30.0	14.3	J *	ug/L		48	10 - 129	32	30
Hexachloroethane	30.0	17.3		ug/L		58	41 - 120	26	30

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

Lab Sample ID: LCSD 400-447399/3-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	30.0	20.6		ug/L		69	47 - 120	14	30
Isophorone	30.0	19.8		ug/L		66	49 - 120	1	30
2-Methylphenol	30.0	21.1		ug/L		70	39 - 123	2	30
3 & 4 Methylphenol	30.0	19.6	J	ug/L		65	38 - 121	1	30
2-Nitroaniline	30.0	22.6		ug/L		75	47 - 150	1	30
3-Nitroaniline	30.0	21.1		ug/L		70	34 - 132	6	30
4-Nitroaniline	30.0	24.0		ug/L		80	41 - 135	4	30
Nitrobenzene	30.0	20.4		ug/L		68	47 - 120	2	30
2-Nitrophenol	30.0	22.4		ug/L		75	28 - 136	1	30
4-Nitrophenol	60.0	38.9		ug/L		65	10 - 150	3	30
N-Nitrosodimethylamine	30.0	21.4		ug/L		71	22 - 148	4	30
N-Nitrosodi-n-propylamine	30.0	20.3		ug/L		68	44 - 120	3	30
N-Nitrosodiphenylamine	29.8	20.7		ug/L		70	56 - 120	1	30
Pentachlorophenol	60.0	44.2		ug/L		74	15 - 141	4	30
Phenol	30.0	18.5		ug/L		62	33 - 120	0	30
Pyridine	60.0	34.3		ug/L		57	26 - 120	9	30
Quinoline	30.0	25.8		ug/L		86	51 - 129	6	30
2,4,5-Trichlorophenol	30.0	21.9		ug/L		73	38 - 147	1	30
2,4,6-Trichlorophenol	30.0	21.5		ug/L		72	36 - 139	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*34 - 120*
2-Fluorophenol	*58*		*10 - 120*
Nitrobenzene-d5	*86*		*27 - 120*
Phenol-d5	*76*		*10 - 120*
Terphenyl-d14	*88*		*53 - 125*
2,4,6-Tribromophenol	*92*		*15 - 135*

Lab Sample ID: LCSD 400-447399/5-A
Matrix: Water
Analysis Batch: 448057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120	41	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*34 - 120*
2-Fluorophenol	*53*		*10 - 120*
Nitrobenzene-d5	*73*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*86*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

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

Lab Sample ID: MB 400-447763/1-A
Matrix: Water
Analysis Batch: 448576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/12/19 14:17	07/18/19 16:43	1
Benzenethiol	ND		10	1.7	ug/L		07/12/19 14:17	07/18/19 16:43	1
Benzoic acid	ND		30	7.3	ug/L		07/12/19 14:17	07/18/19 16:43	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/12/19 14:17	07/18/19 16:43	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/12/19 14:17	07/18/19 16:43	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/12/19 14:17	07/18/19 16:43	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/12/19 14:17	07/18/19 16:43	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/12/19 14:17	07/18/19 16:43	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/19 14:17	07/18/19 16:43	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/19 14:17	07/18/19 16:43	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/12/19 14:17	07/18/19 16:43	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/19 14:17	07/18/19 16:43	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
Dibenzofuran	ND		10	0.52	ug/L		07/12/19 14:17	07/18/19 16:43	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
Diethyl phthalate	ND		10	0.70	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/19 14:17	07/18/19 16:43	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/12/19 14:17	07/18/19 16:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/19 14:17	07/18/19 16:43	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/19 14:17	07/18/19 16:43	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/12/19 14:17	07/18/19 16:43	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/12/19 14:17	07/18/19 16:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/19 14:17	07/18/19 16:43	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/19 14:17	07/18/19 16:43	1
Indene	ND		10	1.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
Isophorone	ND		10	0.57	ug/L		07/12/19 14:17	07/18/19 16:43	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/19 14:17	07/18/19 16:43	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/19 14:17	07/18/19 16:43	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/19 14:17	07/18/19 16:43	1
4-Nitroaniline	ND		10	2.5	ug/L		07/12/19 14:17	07/18/19 16:43	1
Nitrobenzene	ND		10	0.55	ug/L		07/12/19 14:17	07/18/19 16:43	1
2-Nitrophenol	ND		10	0.65	ug/L		07/12/19 14:17	07/18/19 16:43	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/19 14:17	07/18/19 16:43	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/19 14:17	07/18/19 16:43	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/19 14:17	07/18/19 16:43	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/12/19 14:17	07/18/19 16:43	1
Pentachlorophenol	ND		20	1.8	ug/L		07/12/19 14:17	07/18/19 16:43	1
Phenol	ND		10	2.6	ug/L		07/12/19 14:17	07/18/19 16:43	1

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

Lab Sample ID: MB 400-447763/1-A
Matrix: Water
Analysis Batch: 448576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		07/12/19 14:17	07/18/19 16:43	1
Quinoline	ND		10	6.0	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/19 14:17	07/18/19 16:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/19 14:17	07/18/19 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*34 - 120*	*07/12/19 14:17*	*07/18/19 16:43*	*1*
2-Fluorophenol	*86*		*10 - 120*	*07/12/19 14:17*	*07/18/19 16:43*	*1*
Nitrobenzene-d5	*121*	*X*	*27 - 120*	*07/12/19 14:17*	*07/18/19 16:43*	*1*
Phenol-d5	*108*		*10 - 120*	*07/12/19 14:17*	*07/18/19 16:43*	*1*
Terphenyl-d14	*123*		*53 - 125*	*07/12/19 14:17*	*07/18/19 16:43*	*1*
2,4,6-Tribromophenol	*101*		*15 - 135*	*07/12/19 14:17*	*07/18/19 16:43*	*1*

Lab Sample ID: LCS 400-447763/20-A
Matrix: Water
Analysis Batch: 448576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447763

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	*79*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*100*		*27 - 120*
Phenol-d5	*81*		*10 - 120*
Terphenyl-d14	*96*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

Lab Sample ID: LCSD 400-447763/21-A
Matrix: Water
Analysis Batch: 448576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120	16	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*34 - 120*
2-Fluorophenol	*10*		*10 - 120*
Nitrobenzene-d5	*101*		*27 - 120*
Phenol-d5	*16*		*10 - 120*
Terphenyl-d14	*94*		*53 - 125*
2,4,6-Tribromophenol	*18*		*15 - 135*

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

Lab Sample ID: LCSD 400-447763/3-A
Matrix: Water
Analysis Batch: 448576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	16.3	*	ug/L		54	29 - 120	34	30
Benzoic acid	117	249	*	ug/L		214	10 - 150	200	30
Benzyl alcohol	30.0	29.4		ug/L		98	19 - 125	3	30
Bis(2-chloroethoxy)methane	30.0	24.2		ug/L		81	45 - 120	4	30
Bis(2-chloroethyl)ether	30.0	21.2		ug/L		71	48 - 120	1	30
bis (2-chloroisopropyl) ether	30.0	26.1		ug/L		87	30 - 125	1	30
Bis(2-ethylhexyl) phthalate	30.0	29.8		ug/L		99	48 - 150	4	30
4-Bromophenyl phenyl ether	30.0	26.8		ug/L		89	55 - 122	3	30
Butyl benzyl phthalate	30.0	27.7		ug/L		92	46 - 145	2	30
4-Chloroaniline	30.0	16.7		ug/L		56	30 - 120	26	30
4-Chloro-3-methylphenol	30.0	32.7		ug/L		109	39 - 140	0	30
2-Chloronaphthalene	30.0	26.3		ug/L		88	52 - 120	0	30
2-Chlorophenol	30.0	27.1		ug/L		90	34 - 120	2	30
4-Chlorophenyl phenyl ether	30.0	26.6		ug/L		89	58 - 124	2	30
Dibenz[a,h]acridine	30.0	22.2		ug/L		74	46 - 149	7	30
Dibenzofuran	30.0	27.0		ug/L		90	58 - 123	1	30
3,3'-Dichlorobenzidine	40.0	43.0		ug/L		107	39 - 135	10	30
2,4-Dichlorophenol	30.0	30.5		ug/L		102	39 - 128	1	30
Diethyl phthalate	30.0	29.6		ug/L		99	44 - 146	0	30
2,4-Dimethylphenol	30.0	27.9		ug/L		93	44 - 120	1	30
Dimethyl phthalate	30.0	28.5		ug/L		95	50 - 131	2	30
Di-n-butyl phthalate	30.0	31.8		ug/L		106	55 - 131	5	30
4,6-Dinitro-ortho-cresol	60.0	79.3		ug/L		132	10 - 150	3	30
2,4-Dinitrophenol	60.0	98.3	*	ug/L		164	10 - 150	4	30
2,4-Dinitrotoluene	30.0	30.8		ug/L		103	58 - 140	2	30
2,6-Dinitrotoluene	30.0	29.5		ug/L		98	57 - 130	1	30
Di-n-octyl phthalate	30.0	29.3		ug/L		98	50 - 150	2	30
1,4-Dioxane	30.0	14.1		ug/L		47	25 - 120	22	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	27.6		ug/L		92	47 - 123	3	30
Hexachlorobenzene	30.0	29.7		ug/L		99	52 - 131	10	30
Hexachlorocyclopentadiene	30.0	19.0	J	ug/L		63	10 - 129	5	30
Hexachloroethane	30.0	20.3		ug/L		68	41 - 120	2	30
Indene	30.0	44.4	*	ug/L		148	47 - 120	200	30
Isophorone	30.0	27.1		ug/L		90	49 - 120	0	30
2-Methylphenol	30.0	29.1		ug/L		97	39 - 123	2	30
3 & 4 Methylphenol	30.0	26.6		ug/L		89	38 - 121	1	30
2-Nitroaniline	30.0	34.0		ug/L		113	47 - 150	1	30
3-Nitroaniline	30.0	25.6		ug/L		85	34 - 132	16	30
4-Nitroaniline	30.0	30.3		ug/L		101	41 - 135	9	30
Nitrobenzene	30.0	27.6		ug/L		92	47 - 120	1	30
2-Nitrophenol	30.0	29.6		ug/L		99	28 - 136	1	30
4-Nitrophenol	60.0	68.3		ug/L		114	10 - 150	2	30
N-Nitrosodimethylamine	30.0	34.9		ug/L		116	22 - 148	6	30
N-Nitrosodi-n-propylamine	30.0	26.5		ug/L		88	44 - 120	0	30
N-Nitrosodiphenylamine	29.8	27.5		ug/L		92	56 - 120	2	30
Pentachlorophenol	60.0	70.8		ug/L		118	15 - 141	4	30
Phenol	30.0	28.0		ug/L		93	33 - 120	6	30
Pyridine	60.0	26.9		ug/L		45	26 - 120	9	30

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

Lab Sample ID: LCSD 400-447763/3-A
Matrix: Water
Analysis Batch: 448576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Quinoline	30.0	27.5		ug/L		92	51 - 129	0	30
2,4,5-Trichlorophenol	30.0	30.8		ug/L		103	38 - 147	0	30
2,4,6-Trichlorophenol	30.0	30.3		ug/L		101	36 - 139	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*34 - 120*
2-Fluorophenol	*72*		*10 - 120*
Nitrobenzene-d5	*103*		*27 - 120*
Phenol-d5	*93*		*10 - 120*
Terphenyl-d14	*96*		*53 - 125*
2,4,6-Tribromophenol	*95*		*15 - 135*

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

Lab Sample ID: MB 400-447399/1-A
Matrix: Water
Analysis Batch: 448058

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
Anthracene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Chrysene	ND		0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Dibenz(a,h)anthracene	0.0709	J	0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Fluoranthene	0.0350	J	0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
Fluorene	ND		0.20	0.021	ug/L		07/10/19 11:57	07/15/19 16:10	1
Indeno[1,2,3-cd]pyrene	0.0779	J	0.20	0.040	ug/L		07/10/19 11:57	07/15/19 16:10	1
Phenanthrene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
Pyrene	0.0309	J	0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/10/19 11:57	07/15/19 16:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*131*		*33 - 138*	*07/10/19 11:57*	*07/15/19 16:10*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/10/19 11:57*	*07/15/19 16:10*	*1*
Nitrobenzene-d5	*91*		*19 - 130*	*07/10/19 11:57*	*07/15/19 16:10*	*1*

Lab Sample ID: LCS 400-447399/2-A
Matrix: Water
Analysis Batch: 448058

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	21.9		ug/L		73	41 - 120

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

Lab Sample ID: LCS 400-447399/2-A
Matrix: Water
Analysis Batch: 448058

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	30.0	21.4		ug/L		71	44 - 120
Anthracene	30.0	21.9		ug/L		73	49 - 120
Benzo[a]anthracene	30.0	19.8		ug/L		66	61 - 135
Benzo[a]pyrene	30.0	21.8		ug/L		73	52 - 120
Benzo[b]fluoranthene	30.0	23.6		ug/L		79	53 - 134
Benzo[g,h,i]perylene	30.0	20.0		ug/L		67	47 - 133
Benzo[k]fluoranthene	30.0	21.4		ug/L		71	57 - 134
Chrysene	30.0	19.7		ug/L		66	55 - 122
Dibenz(a,h)anthracene	30.0	20.4		ug/L		68	48 - 146
Fluoranthene	30.0	19.9		ug/L		66	54 - 128
Fluorene	30.0	23.7		ug/L		79	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	19.7		ug/L		66	43 - 142
Phenanthrene	30.0	20.9		ug/L		70	48 - 120
Pyrene	30.0	21.4		ug/L		71	48 - 132
1-Methylnaphthalene	30.0	18.5		ug/L		62	41 - 120
2-Methylnaphthalene	30.0	18.5		ug/L		62	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*87*		*33 - 138*
2-Fluorobiphenyl	*69*		*15 - 122*
Nitrobenzene-d5	*68*		*19 - 130*

Lab Sample ID: LCSD 400-447399/3-A
Matrix: Water
Analysis Batch: 448058

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447399

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	21.8		ug/L		73	41 - 120	0	56
Acenaphthylene	30.0	21.4		ug/L		71	44 - 120	0	56
Anthracene	30.0	21.6		ug/L		72	49 - 120	2	51
Benzo[a]anthracene	30.0	20.1		ug/L		67	61 - 135	2	49
Benzo[a]pyrene	30.0	21.9		ug/L		73	52 - 120	0	50
Benzo[b]fluoranthene	30.0	25.0		ug/L		83	53 - 134	6	54
Benzo[g,h,i]perylene	30.0	20.3		ug/L		68	47 - 133	2	50
Benzo[k]fluoranthene	30.0	21.8		ug/L		73	57 - 134	2	52
Chrysene	30.0	20.3		ug/L		68	55 - 122	3	50
Dibenz(a,h)anthracene	30.0	20.7		ug/L		69	48 - 146	1	50
Fluoranthene	30.0	20.6		ug/L		69	54 - 128	3	52
Fluorene	30.0	23.4		ug/L		78	45 - 125	1	56
Indeno[1,2,3-cd]pyrene	30.0	20.1		ug/L		67	43 - 142	2	51
Phenanthrene	30.0	21.1		ug/L		70	48 - 120	1	56
Pyrene	30.0	22.6		ug/L		75	48 - 132	5	52
1-Methylnaphthalene	30.0	19.5		ug/L		65	41 - 120	5	55
2-Methylnaphthalene	30.0	19.9		ug/L		66	32 - 124	7	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*91*		*33 - 138*
2-Fluorobiphenyl	*73*		*15 - 122*

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

Lab Sample ID: LCSD 400-447399/3-A
Matrix: Water
Analysis Batch: 448058

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447399

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5	75		19 - 130

Lab Sample ID: MB 400-447763/1-A
Matrix: Water
Analysis Batch: 448495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
Anthracene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Chrysene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Fluoranthene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
Fluorene	ND		0.20	0.021	ug/L		07/12/19 14:17	07/18/19 12:50	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/12/19 14:17	07/18/19 12:50	1
Phenanthrene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
Pyrene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/12/19 14:17	07/18/19 12:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	155	X	33 - 138	07/12/19 14:17	07/18/19 12:50	1
2-Fluorobiphenyl	113		15 - 122	07/12/19 14:17	07/18/19 12:50	1
Nitrobenzene-d5	89		19 - 130	07/12/19 14:17	07/18/19 12:50	1

Lab Sample ID: LCS 400-447763/2-A
Matrix: Water
Analysis Batch: 448495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	26.1		ug/L		87	41 - 120
Acenaphthylene	30.0	24.4		ug/L		81	44 - 120
Anthracene	30.0	24.6		ug/L		82	49 - 120
Benzo[a]anthracene	30.0	22.0		ug/L		73	61 - 135
Benzo[a]pyrene	30.0	24.2		ug/L		81	52 - 120
Benzo[b]fluoranthene	30.0	26.6		ug/L		89	53 - 134
Benzo[g,h,i]perylene	30.0	16.5		ug/L		55	47 - 133
Benzo[k]fluoranthene	30.0	30.2		ug/L		101	57 - 134
Chrysene	30.0	23.1		ug/L		77	55 - 122
Dibenz(a,h)anthracene	30.0	18.4		ug/L		61	48 - 146
Fluoranthene	30.0	22.6		ug/L		75	54 - 128
Fluorene	30.0	26.5		ug/L		88	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	18.1		ug/L		60	43 - 142

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

Lab Sample ID: LCS 400-447763/2-A
Matrix: Water
Analysis Batch: 448495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenanthrene	30.0	23.4		ug/L		78	48 - 120
Pyrene	30.0	21.8		ug/L		73	48 - 132
1-Methylnaphthalene	30.0	23.0		ug/L		77	41 - 120
2-Methylnaphthalene	30.0	21.9		ug/L		73	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*83*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*60*		*19 - 130*

Lab Sample ID: LCSD 400-447763/3-A
Matrix: Water
Analysis Batch: 448495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.0		ug/L		90	41 - 120	3	56
Acenaphthylene	30.0	25.9		ug/L		86	44 - 120	6	56
Anthracene	30.0	26.1		ug/L		87	49 - 120	6	51
Benzo[a]anthracene	30.0	23.6		ug/L		79	61 - 135	7	49
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120	8	50
Benzo[b]fluoranthene	30.0	29.1		ug/L		97	53 - 134	9	54
Benzo[g,h,i]perylene	30.0	16.9		ug/L		56	47 - 133	2	50
Benzo[k]fluoranthene	30.0	32.3		ug/L		108	57 - 134	7	52
Chrysene	30.0	24.7		ug/L		82	55 - 122	6	50
Dibenz(a,h)anthracene	30.0	19.6		ug/L		65	48 - 146	6	50
Fluoranthene	30.0	24.3		ug/L		81	54 - 128	7	52
Fluorene	30.0	28.4		ug/L		95	45 - 125	7	56
Indeno[1,2,3-cd]pyrene	30.0	18.3		ug/L		61	43 - 142	1	51
Phenanthrene	30.0	24.9		ug/L		83	48 - 120	6	56
Pyrene	30.0	23.3		ug/L		78	48 - 132	7	52
1-Methylnaphthalene	30.0	19.5		ug/L		65	41 - 120	17	55
2-Methylnaphthalene	30.0	21.1		ug/L		70	32 - 124	4	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*81*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*62*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-448201/1-A
Matrix: Water
Analysis Batch: 448291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448201

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		07/16/19 12:15	07/16/19 17:11	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/16/19 12:15	07/16/19 17:11	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-448201/1-A
Matrix: Water
Analysis Batch: 448291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448201

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	115		51 - 149	07/16/19 12:15	07/16/19 17:11	1

Lab Sample ID: LCS 400-448201/2-A
Matrix: Water
Analysis Batch: 448291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.119		ug/L		119	60 - 140
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	102		51 - 149

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other Lab Vendor # 1364589 (TestAmerica)

Shell Oil Products US Chain Of Custody Reco

400-172782 COC

AECOM

Please Check Appropriate Box:		
☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Pr
Bob Billman	25278
PO #	GSAP Project ID
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/R/02

IF NO INCIDENT # APPLIES

DATE: 7/8/19

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 60592794 - 1.03.003 / 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name Company Office Location): elizabeth.kunkel@aecom.com

PHONE NO: 314-802-1171

E-MAIL:

AECOM Work ID

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME (S) (Print): I. Parton B. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-Mail: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-070819-8260	7/8/19	0000	WATER	X					2	2				
	TB-ROX-070819-8011		0000		X					2			2		
	MW4-ROX-070819-EB		1045		X			X		6	2	1	2	1	
	MW4-ROX-070819		1120		X			X		6	2	1	2	1	
	MW25-ROX-070819		1200		X			X		6	2	1	2	1	
	MW8-ROX-070819		1305		X			X		6	2	1	2	1	
	MW7-ROX-070819		1355		X			X		6	2	1	2	1	
	MW7-ROX-070819-DUP		1355		X			X		6	2	1	2	1	
										—					

TEMPERATURE ON RECEIPT C°

Relinquished by (Signature)	Received by (Signature)	Date	Time
Bill Howell	Fedex: 4782 2882 5470 4782 2882 5480	7/8/19	1800
	Diego Chavez	07.09.19	853

Version 14Dec15

custody seals: 819081, 819080, 819079, 819078

2.8 °C IR8

2.1 °C IR8

Page 66 of 70

7/26/2019

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
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/8/19

PAGE: 1 of 1

SHIPPING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60592794 - 1.03.003 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): elizabeth.kunkel@aecom.com

PHONE NO.: 314-802-1171

E-MAIL:

AECOM Client ID

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): T. Partin B. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-070819-8260	7/8/19	0000	WATER	X					2	2				
	TB-ROX-070819-8011	"	0000	"	X					2			2		
	MW4-ROX-070819-EB	"	1045	"	X			X		6	2	1	2	1	
	MW4-ROX-070819	"	1120	"	X			X		6	2	1	2	1	
	MW25-ROX-070819	"	1200	"	X			X		6	2	1	2	1	
	MW8-ROX-070819	"	1305	"	X			X		6	2	1	2	1	
	MW7-ROX-070819	"	1355	"	X			X		6	2	1	2	1	
	MW7-ROX-070819-DUP	"	1355	"	X			X		6	2	1	2	1	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Bob Howell	Fedex: 4782 2882 5470 4782 2882 5480	7/8/19	1800
	Diego Alvarez	07.09.19	853

Version: 14Dec16

Custody seals: 819081, 819080, 819079, 819078 2.8 °C IR8

Page 67 of 70

7/26/2019

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other Lab Vendor # 1364589 (TestAmerica)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

PO #: 60592794 - 1.03.003 | 60592794 - 1.03.0033

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/8/19

PAGE: 1 of 1

SAMPLE INFO COMPANY: AECOM

COST CTR#:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60592794 - 1.03.003 | 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): elizabeth.kunkel@aecom.com

PHONE NO: 314-802-1171

E MAIL:

AECOM User ID:

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

SAMPLER NAME(S) (Print): I. Parton B. Hewell

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:

* Please include "J" values on Reports
Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60592794 - 1.03.003: VOC 8260 | SVOC 8270

UNIT COST 60592794 - 1.03.0033: 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-070819-8260	7/8/19	0000	WATER	X					2	2			
	TB-ROX-070819-8011	"	0000	"	X					2			2	
	MW4-ROX-070819-EB	"	1045	"	X			X		6	2	1	2	1
	MW4-ROX-070819	"	1120	"	X			X		6	2	1	2	1
	MW25-ROX-070819	"	1200	"	X			X		6	2	1	2	1
	MW8-ROX-070819	"	1305	"	X			X		6	2	1	2	1
	MW7-ROX-070819	"	1355	"	X			X		6	2	1	2	1
	MW7-ROX-070819-DUP	"	1355	"	X			X		6	2	1	2	1

	Relinquished by (Signature)	Received by (Signature)	Date	Time
1	B. Hewell	Fedex 4782 2882 5470 4782 2882 5480	7/8/19	1800
2		Doug Clarke	07.09.19	853
3				

Custody seals: 819081, 819080, 819079, 819078

2.1°C IR8

Version 14Dec15

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7/26/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-172762-1
SDG Number:

Login Number: 172762
List Number: 1
Creator: Perez, Trina M

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	819081,819080,819079,819078
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8°C, 2.1°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-172762-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-172846-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/1/2019

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

Sample Identification	Sample Identification
TB-ROX-070919-8260-B	TB-ROX-070919-8011-B
P114R-ROX-070919-EB	P114R-ROX-070919
MW13-ROX-070919	MW16-ROX-070919
MW2-ROX-070919	TB-ROX-070919-8260-A
TB-ROX-070919-8011-A	P54-ROX-070919-EB
P54-ROX-070919	MW24-ROX-070919
MW11-ROX-070919	MW27-ROX-070919

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated bis(2-ethylhexyl) phthalate was detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCD recoveries were outside evaluation criteria. Several VOC and/or SVOC surrogate recoveries were outside criteria in samples P54-ROX-070919 and MW27-ROX-070919, and PAH surrogate recoveries were outside criteria in the method blank. Several VOC, SVOC, and VOC by 8011 MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW16-ROX-070919. PAHs in sample P114R-ROX-070919 were diluted due to physical properties of the sample, and SVOCs in sample P114R-ROX-070919 and VOCs in sample MW2-ROX-070919 were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verification for several analytes, and the initial calibration verification for n-nitrosodiphenylamine, were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-447641/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	94.6 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
P54-ROX-070919	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 400-448479/1002	VOCs	Acrylonitrile	**151**	NA	64-142
LCS 400-448479/1002	VOCs	2-Chloroethyl vinyl ether	**357**	NA	10-160
LCS 400-448479/1002	VOCs	1,2-Dichloroethane	**138**	NA	69-130
LCS 400-447641/2-A	SVOCs	3,3'-Dichlorobenzidine	**208**	NA	39-135
LCS 400-447641/2-A	SVOCs	Hexachlorobenzene	**134**	NA	52-131
LCS 400-447641/2-A	SVOCs	4-Nitroaniline	**149**	NA	41-135
LCS/LCSD 400-447641/4-A/5-A	SVOCs	Benzenethiol	**3/4**	15	10-120/30
LCS 400-448410/2-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**185**	NA	60-140

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-447641/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-070919	SVOCs	Benzenethiol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-070919	SVOCs	Benzenethiol	**UJ**
MW16-ROX-070919	SVOCs	Benzenethiol	**UJ**
MW2-ROX-070919	SVOCs	Benzenethiol	**UJ**
P54-ROX-070919	SVOCs	Benzenethiol	**UJ**
MW24-ROX-070919	SVOCs	Benzenethiol	**UJ**
MW11-ROX-070919	SVOCs	Benzenethiol	**UJ**
MW27-ROX-070919	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P54-ROX-070919	VOCs	4-Bromofluorobenzene	**119**	78-118
MW27-ROX-070919	VOCs	4-Bromofluorobenzene	**121**	78-118
MW27-ROX-070919	SVOCs	2-Fluorophenol	**2**	10-120
MB 400-447641/1-A	PAHs	Terphenyl-d_{14}	**0**	33-138
MB 400-447641/1-A	PAHs	2-Fluorobiphenyl	**0**	15-122
MB 400-447641/1-A	PAHs	Nitrobenzene-d_5	**NaN**	19-130

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 fraction SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Method blank MB 400-447641/1-A is a quality control sample and does not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW16-ROX-070919 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-070919	VOCs	2-Butanone (MEK)	**53/48**	10	55-150/30
MW16-ROX-070919	VOCs	Hexachlorobutadiene	89/60	**38**	31-149/36
MW16-ROX-070919	VOCs	n-Butylbenzene	99/70	**35**	41-142/31
MW16-ROX-070919	SVOCs	Benzyl alcohol	**0/7**	**NC**	10-154/37
MW16-ROX-070919	SVOCs	Dibenz[a,h]acridine	54/91	**51**	42-147/40
MW16-ROX-070919	SVOCs	2,4-Dinitrophenol	73/109	**38**	10-166/36
MW16-ROX-070919	VOCs by 8011	1,2-Dibromo-3-chloropropane	**201/174**	13	65-135/20

Analytical data that required qualification based on MS/MSD data are included in the table below. Analytical data associated with RPD alone outside evaluation criteria did not require qualification. Analytical data reported as non-detect and associated with MSMSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-070919	VOCs	2-Butanone (MEK)	**UJ**
MW16-ROX-070919	SVOCs	Benzyl alcohol	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted, with the exception of PAHs in sample P114R-ROX-070919. PAHs were non-detect at a dilution factor of 5X, with a raised reporting limits of 0.96 µg/L. Due to historical PAH detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, PAHs in sample P114R-ROX-070919 were qualified as estimated non-detect due to sample dilution and historical detections.

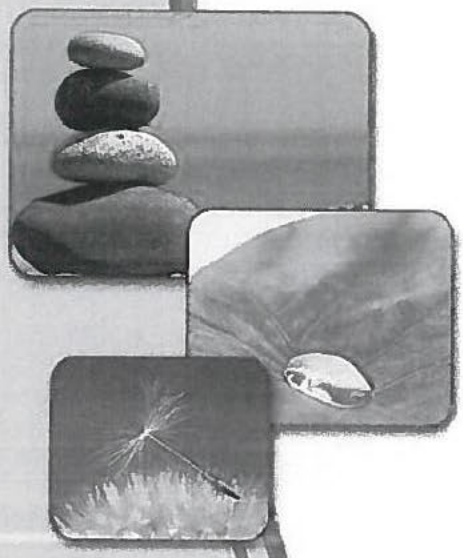
Sample ID	Parameter	Analyte	Qualification
P114R-ROX-070919	PAHs	All non-detects	**UJ**

Additionally, the continuing calibration verification for several analytes, and the initial calibration verification for n-nitrosodiphenylamine, were below acceptance criteria; analytical data that required qualification based on ICV and CCV data are included in the table below.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-070919	SVOCs	Dibenz[a,h]acridine	**UJ**
MW13-ROX-070919	SVOCs	Dibenz[a,h]acridine	**UJ**
MW16-ROX-070919	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW16-ROX-070919	SVOCs	1,4-Dioxane	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-070919	SVOCs	Pyridine	UJ
MW2-ROX-070919	SVOCs	Dibenz[a,h]acridine	UJ
P54-ROX-070919	SVOCs	Dibenz[a,h]acridine	UJ
MW24-ROX-070919	SVOCs	Dibenz[a,h]acridine	UJ
MW11-ROX-070919	SVOCs	Dibenz[a,h]acridine	UJ
MW27-ROX-070919	SVOCs	Dibenz[a,h]acridine	UJ
P114R-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
MW13-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
MW16-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
MW2-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
P54-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
MW24-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
MW11-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ
MW27-ROX-070919	SVOCs	n-Nitrosodiphenylamine	UJ

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-172846-1
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:
7/29/2019 12:53:07 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

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Reviewed 8/1/19 MR

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: 400-172846-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-172846-1

Comments
No additional comments.

Receipt
The samples were received on 7/10/2019 8:59 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, 1.2° C, 2.1° C and 5.1° C.

GC/MS VOA
Method(s) 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-070919-8260-B (400-172846-1), P114R-ROX-070919-EB (400-172846-3), P114R-ROX-070919 (400-172846-4), MW13-ROX-070919 (400-172846-5), MW16-ROX-070919 (400-172846-6), MW2-ROX-070919 (400-172846-7), TB-ROX-070919-8260-A (400-172846-8), P54-ROX-070919-EB (400-172846-10), P54-ROX-070919 (400-172846-11), MW24-ROX-070919 (400-172846-12), MW11-ROX-070919 (400-172846-13) and MW27-ROX-070919 (400-172846-14). 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(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-448479 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 400-448479 recovered outside control limits for the following analytes: 1,2-Dichloroethane, 2-Chloroethyl vinyl ether and Acrylonitrile. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW2-ROX-070919 (400-172846-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Surrogate recovery for the following samples were outside the upper control limit: P54-ROX-070919 (400-172846-11) and MW27-ROX-070919 (400-172846-14). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch analytical batch 400-448479 recovered above the upper control limit for 2-Chloroethyl vinyl ether, Acrolein, Acrylonitrile and Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-448479 was outside control limits. Sample matrix interference is suspected.

Method(s) 8260B: The initial calibration verification (ICV) analyzed in batch 400-429944 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method(s) 8270D: The initial calibration verification (ICV) analyzed in batch 400-442653 was outside method criteria for the following analyte(s): N-Nitrosodiphenylamine. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-447641 and analytical batch 400-448422 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.

Job ID: 400-172846-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448422 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether, 1,4-Dioxane, Benzyl alcohol and Pyridine. 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448422 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448422 recovered above the upper control limit for N-Nitrosodimethylamine and 3-Nitroaniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The method blank for preparation batch 400-447641 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448576 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448576 recovered outside acceptance criteria, low biased, for Dibenz[a,h]acridine. 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(s) 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: MW27-ROX-070919 (400-172846-14). These results have been reported and qualified.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 400-447641 and analytical batch 400-448987 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine, Hexachlorobenzene and 4-Nitroaniline. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-447641 and analytical batch 400-448422 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(s) 8270D: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-447641 and analytical batch 400-448422 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(s) 8270D: The initial calibration verification (ICV) analyzed in batch 400-442656 was outside method criteria for the following analyte(s): Benzenethiol. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D LL: Surrogate compounds were inadvertently omitted during the extraction process for the following sample: (MB 400-447641/1-A). All related sample surrogates are within QC limits; therefore, the data have been reported and qualified.

Method(s) 8270D LL: The following sample was diluted due to color and viscosity: P114R-ROX-070919 (400-172846-4). Elevated reporting limits (RL) are provided.

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

GC Semi VOA

Method(s) 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-448201 and analytical batch

Job ID: 400-172846-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

400-448291 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448291 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448291 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448449 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(s) 8011: The laboratory control sample (LCS) for preparation batch 400-448410 and analytical batch 400-448449 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448449 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 following sample is impacted: (CCV 400-448449/2).

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: 400-172846-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-172846-1	TB-ROX-070919-8260-B	Water	07/09/19 00:00	07/10/19 08:59	
400-172846-2	TB-ROX-070919-8011-B	Water	07/09/19 00:00	07/10/19 08:59	
400-172846-3	P114R-ROX-070919-EB	Water	07/09/19 08:45	07/10/19 08:59	
400-172846-4	P114R-ROX-070919	Water	07/09/19 09:35	07/10/19 08:59	
400-172846-5	MW13-ROX-070919	Water	07/09/19 10:20	07/10/19 08:59	
400-172846-6	MW16-ROX-070919	Water	07/09/19 11:45	07/10/19 08:59	
400-172846-7	MW2-ROX-070919	Water	07/09/19 12:45	07/10/19 08:59	
400-172846-8	TB-ROX-070919-8260-A	Water	07/09/19 00:00	07/10/19 08:59	
400-172846-9	TB-ROX-070919-8011-A	Water	07/09/19 00:00	07/10/19 08:59	
400-172846-10	P54-ROX-070919-EB	Water	07/09/19 09:45	07/10/19 08:59	
400-172846-11	P54-ROX-070919	Water	07/09/19 10:25	07/10/19 08:59	
400-172846-12	MW24-ROX-070919	Water	07/09/19 11:15	07/10/19 08:59	
400-172846-13	MW11-ROX-070919	Water	07/09/19 12:10	07/10/19 08:59	
400-172846-14	MW27-ROX-070919	Water	07/09/19 12:55	07/10/19 08:59	

Detection Summary

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

Job ID: 400-172846-1

Client Sample ID: TB-ROX-070919-8260-B

Lab Sample ID: 400-172846-1

No Detections.

Client Sample ID: TB-ROX-070919-8011-B

Lab Sample ID: 400-172846-2

No Detections.

Client Sample ID: P114R-ROX-070919-EB

Lab Sample ID: 400-172846-3

No Detections.

Client Sample ID: P114R-ROX-070919

Lab Sample ID: 400-172846-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.5		1.0	0.74	ug/L	1		8260B	Total/NA
Toluene	0.99	J	1.0	0.41	ug/L	1		8260B	Total/NA
3 & 4 Methylphenol	5.4	J	96	5.0	ug/L	5		8270D	Total/NA

Client Sample ID: MW13-ROX-070919

Lab Sample ID: 400-172846-5

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	1.0		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.51		0.19	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.47		0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW16-ROX-070919

Lab Sample ID: 400-172846-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.036	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.053	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.029	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Pyrene	0.038	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.030	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW2-ROX-070919

Lab Sample ID: 400-172846-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1200		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	74		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	780		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	64		5.0	5.0	ug/L	5		8260B	Total/NA
n-Butylbenzene	11		5.0	3.8	ug/L	5		8260B	Total/NA
N-Propylbenzene	110		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	63		25	3.0	ug/L	5		8260B	Total/NA
p-Isopropyltoluene	6.8		5.0	3.6	ug/L	5		8260B	Total/NA
sec-Butylbenzene	6.6		5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	9.2		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	360		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	110		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	840		50	8.0	ug/L	5		8260B	Total/NA
Phenanthrene	0.021	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	16		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	31		0.19	0.019	ug/L	1		8270D LL	Total/NA
3 & 4 Methylphenol	4.9	J	19	0.99	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: 400-172846-1

Client Sample ID: TB-ROX-070919-8260-A

Lab Sample ID: 400-172846-8

No Detections.

Client Sample ID: TB-ROX-070919-8011-A

Lab Sample ID: 400-172846-9

No Detections.

Client Sample ID: P54-ROX-070919-EB

Lab Sample ID: 400-172846-10

No Detections.

Client Sample ID: P54-ROX-070919

Lab Sample ID: 400-172846-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.022	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.023	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	~~8.5~~	J B	10	5.1	ug/L	1		8270D	Total/NA

Client Sample ID: MW24-ROX-070919

Lab Sample ID: 400-172846-12

No Detections.

Client Sample ID: MW11-ROX-070919

Lab Sample ID: 400-172846-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.054	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Benzo[a]pyrene	0.062	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Benzo[b]fluoranthene	0.068	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Benzo[g,h,i]perylene	0.051	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Benzo[k]fluoranthene	0.060	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Chrysene	0.042	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Dibenz(a,h)anthracene	0.053	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene	0.053	J	0.21	0.042	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.027	J	0.21	0.021	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW27-ROX-070919

Lab Sample ID: 400-172846-14

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-172846-1

Client Sample ID: TB-ROX-070919-8260-B
Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-1
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			07/18/19 10:28	1
Acrolein	ND		20	10	ug/L			07/18/19 10:28	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 10:28	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 10:28	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 10:28	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 10:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 10:28	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 10:28	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 10:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 10:28	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 10:28	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 10:28	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 10:28	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 10:28	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 10:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 10:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 10:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 10:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 10:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 10:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 10:28	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 10:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 10:28	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 10:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 10:28	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 10:28	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 10:28	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 10:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 10:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 10:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 10:28	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 10:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 10:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 10:28	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 10:28	1

Client Sample ID: TB-ROX-070919-8260-B
Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	1.0	ug/L			07/18/19 10:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 10:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 10:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 10:28	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 10:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 10:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 10:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 10:28	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 10:28	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 10:28	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 10:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 10:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 10:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 10:28	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 10:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 10:28	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 10:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/18/19 10:28*	*1*
Dibromofluoromethane	*109*		*81 - 121*		*07/18/19 10:28*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/18/19 10:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 09:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*78 - 118*		*07/19/19 09:39*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*07/19/19 09:39*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*07/19/19 09:39*	*1*

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

Job ID: 400-172846-1

Client Sample ID: TB-ROX-070919-8011-B
Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		07/16/19 12:15	07/16/19 20:36	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		07/16/19 12:15	07/16/19 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/16/19 12:15*	*07/16/19 20:36*	*1*

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

Job ID: 400-172846-1

Client Sample ID: P114R-ROX-070919-EB
Date Collected: 07/09/19 08:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-3
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			07/18/19 14:10	1
Acrolein	ND		20	10	ug/L			07/18/19 14:10	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 14:10	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 14:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 14:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 14:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 14:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 14:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 14:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 14:10	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 14:10	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 14:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 14:10	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 14:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 14:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 14:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 14:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 14:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 14:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 14:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 14:10	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 14:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 14:10	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 14:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 14:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 14:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 14:10	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 14:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 14:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 14:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 14:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 14:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 14:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 14:10	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 14:10	1

Client Sample ID: P114R-ROX-070919-EB
Date Collected: 07/09/19 08:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-3
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			07/18/19 14:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 14:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 14:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 14:10	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 14:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 14:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 14:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 14:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 14:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 14:10	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 14:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 14:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 14:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 14:10	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 14:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 14:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/18/19 14:10*	*1*
Dibromofluoromethane	*110*		*81 - 121*		*07/18/19 14:10*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/18/19 14:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*78 - 118*		*07/19/19 17:01*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*07/19/19 17:01*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/19/19 17:01*	*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	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
Anthracene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Chrysene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1
Fluoranthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
Fluorene	ND		0.19	0.020	ug/L		07/11/19 17:18	07/19/19 14:58	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		07/11/19 17:18	07/19/19 14:58	1

Client Sample ID: P114R-ROX-070919-EB
Date Collected: 07/09/19 08:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
Pyrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*135*		*33 - 138*	*07/11/19 17:18*	*07/19/19 14:58*	*1*
2-Fluorobiphenyl	*85*		*15 - 122*	*07/11/19 17:18*	*07/19/19 14:58*	*1*
Nitrobenzene-d5	*76*		*19 - 130*	*07/11/19 17:18*	*07/19/19 14:58*	*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		07/11/19 17:18	07/18/19 23:06	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/11/19 17:18	07/18/19 23:06	1
Benzoic acid	ND		29	7.0	ug/L		07/11/19 17:18	07/18/19 23:06	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 23:06	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/11/19 17:18	07/18/19 23:06	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/11/19 17:18	07/18/19 23:06	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/11/19 17:18	07/18/19 23:06	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/11/19 17:18	07/18/19 23:06	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/11/19 17:18	07/18/19 23:06	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/11/19 17:18	07/18/19 23:06	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 23:06	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/11/19 17:18	07/18/19 23:06	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/11/19 17:18	07/18/19 23:06	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/11/19 17:18	07/18/19 23:06	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 23:06	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/11/19 17:18	07/18/19 23:06	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/11/19 17:18	07/18/19 23:06	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/11/19 17:18	07/18/19 23:06	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/11/19 17:18	07/18/19 23:06	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/11/19 17:18	07/18/19 23:06	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/11/19 17:18	07/18/19 23:06	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/11/19 17:18	07/18/19 23:06	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/11/19 17:18	07/18/19 23:06	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 23:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 23:06	1
Hexachlorobenzene	ND	*	9.6	0.24	ug/L		07/11/19 17:18	07/18/19 23:06	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/11/19 17:18	07/18/19 23:06	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/11/19 17:18	07/18/19 23:06	1
Indene	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 23:06	1
Isophorone	ND		9.6	0.55	ug/L		07/11/19 17:18	07/18/19 23:06	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/11/19 17:18	07/18/19 23:06	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/11/19 17:18	07/18/19 23:06	1

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

Job ID: 400-172846-1

Client Sample ID: P114R-ROX-070919-EB
Date Collected: 07/09/19 08:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.6	2.1	ug/L		07/11/19 17:18	07/18/19 23:06	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/11/19 17:18	07/18/19 23:06	1
4-Nitroaniline	ND	*	9.6	2.4	ug/L		07/11/19 17:18	07/18/19 23:06	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/11/19 17:18	07/18/19 23:06	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/11/19 17:18	07/18/19 23:06	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/11/19 17:18	07/18/19 23:06	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/11/19 17:18	07/18/19 23:06	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/11/19 17:18	07/18/19 23:06	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/11/19 17:18	07/18/19 23:06	1
Pentachlorophenol	ND		19	1.7	ug/L		07/11/19 17:18	07/18/19 23:06	1
Phenol	ND		9.6	2.5	ug/L		07/11/19 17:18	07/18/19 23:06	1
Pyridine	ND		9.6	3.1	ug/L		07/11/19 17:18	07/18/19 23:06	1
Quinoline	ND		9.6	5.8	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/11/19 17:18	07/18/19 23:06	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/11/19 17:18	07/18/19 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*07/11/19 17:18*	*07/18/19 23:06*	*1*
2-Fluorophenol	*66*		*10 - 120*	*07/11/19 17:18*	*07/18/19 23:06*	*1*
Nitrobenzene-d5	*93*		*27 - 120*	*07/11/19 17:18*	*07/18/19 23:06*	*1*
Phenol-d5	*81*		*10 - 120*	*07/11/19 17:18*	*07/18/19 23:06*	*1*
Terphenyl-d14	*93*		*53 - 125*	*07/11/19 17:18*	*07/18/19 23:06*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*07/11/19 17:18*	*07/18/19 23:06*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		07/16/19 12:15	07/16/19 21:21	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/16/19 12:15	07/16/19 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*07/16/19 12:15*	*07/16/19 21:21*	*1*

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

Job ID: 400-172846-1

Client Sample ID: P114R-ROX-070919
Date Collected: 07/09/19 09:35
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-4
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			07/18/19 14:34	1
Acrolein	ND		20	10	ug/L			07/18/19 14:34	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 14:34	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 14:34	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 14:34	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 14:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 14:34	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 14:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 14:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 14:34	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 14:34	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 14:34	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 14:34	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 14:34	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 14:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 14:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 14:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 14:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 14:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 14:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 14:34	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 14:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 14:34	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 14:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 14:34	1
Methyl tert-butyl ether	4.5		1.0	0.74	ug/L			07/18/19 14:34	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 14:34	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 14:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 14:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 14:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 14:34	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 14:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 14:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 14:34	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 14:34	1

Client Sample ID: P114R-ROX-070919
Date Collected: 07/09/19 09:35
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-4
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			07/18/19 14:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 14:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 14:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 14:34	1
Toluene	0.99	J	1.0	0.41	ug/L			07/18/19 14:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 14:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 14:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 14:34	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 14:34	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 14:34	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 14:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 14:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 14:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 14:34	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 14:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 14:34	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/18/19 14:34*	*1*
Dibromofluoromethane	*107*		*81 - 121*		*07/18/19 14:34*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/18/19 14:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*78 - 118*		*07/19/19 17:27*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*07/19/19 17:27*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/19/19 17:27*	*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	U3	0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
Acenaphthylene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
Anthracene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
Benzo[a]anthracene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Benzo[a]pyrene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Benzo[b]fluoranthene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Benzo[g,h,i]perylene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Benzo[k]fluoranthene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Chrysene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Dibenz(a,h)anthracene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5
Fluoranthene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
Fluorene	ND		0.96	0.10	ug/L		07/11/19 17:18	07/18/19 23:15	5
Indeno[1,2,3-cd]pyrene	ND		0.96	0.19	ug/L		07/11/19 17:18	07/18/19 23:15	5

Client Sample ID: P114R-ROX-070919
Date Collected: 07/09/19 09:35
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
Pyrene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
1-Methylnaphthalene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5
2-Methylnaphthalene	ND		0.96	0.096	ug/L		07/11/19 17:18	07/18/19 23:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*63*		*33 - 138*	*07/11/19 17:18*	*07/18/19 23:15*	*5*
2-Fluorobiphenyl	*69*		*15 - 122*	*07/11/19 17:18*	*07/18/19 23:15*	*5*
Nitrobenzene-d5	*67*		*19 - 130*	*07/11/19 17:18*	*07/18/19 23:15*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		48	18	ug/L		07/11/19 17:18	07/18/19 22:24	5
Benzenethiol	ND	*	48	8.2	ug/L		07/11/19 17:18	07/18/19 22:24	5
Benzoic acid	ND		140	35	ug/L		07/11/19 17:18	07/18/19 22:24	5
Benzyl alcohol	ND		48	9.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
Bis(2-chloroethoxy)methane	ND		48	3.3	ug/L		07/11/19 17:18	07/18/19 22:24	5
Bis(2-chloroethyl)ether	ND		48	3.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
bis (2-chloroisopropyl) ether	ND		48	3.9	ug/L		07/11/19 17:18	07/18/19 22:24	5
Bis(2-ethylhexyl) phthalate	ND		48	24	ug/L		07/11/19 17:18	07/18/19 22:24	5
4-Bromophenyl phenyl ether	ND		48	1.5	ug/L		07/11/19 17:18	07/18/19 22:24	5
Butyl benzyl phthalate	ND		48	3.3	ug/L		07/11/19 17:18	07/18/19 22:24	5
4-Chloroaniline	ND		48	16	ug/L		07/11/19 17:18	07/18/19 22:24	5
4-Chloro-3-methylphenol	ND		48	18	ug/L		07/11/19 17:18	07/18/19 22:24	5
2-Chloronaphthalene	ND		48	2.5	ug/L		07/11/19 17:18	07/18/19 22:24	5
2-Chlorophenol	ND		48	11	ug/L		07/11/19 17:18	07/18/19 22:24	5
4-Chlorophenyl phenyl ether	ND		48	9.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
Dibenz[a,h]acridine	ND		48	14	ug/L		07/11/19 17:18	07/18/19 22:24	5
Dibenzofuran	ND		48	2.5	ug/L		07/11/19 17:18	07/18/19 22:24	5
3,3'-Dichlorobenzidine	ND	*	48	12	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,4-Dichlorophenol	ND		48	14	ug/L		07/11/19 17:18	07/18/19 22:24	5
Diethyl phthalate	ND		48	3.4	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,4-Dimethylphenol	ND		48	17	ug/L		07/11/19 17:18	07/18/19 22:24	5
Dimethyl phthalate	ND		48	2.9	ug/L		07/11/19 17:18	07/18/19 22:24	5
Di-n-butyl phthalate	ND		48	13	ug/L		07/11/19 17:18	07/18/19 22:24	5
4,6-Dinitro-ortho-cresol	ND		48	9.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,4-Dinitrophenol	ND		140	16	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,4-Dinitrotoluene	ND		48	9.1	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,6-Dinitrotoluene	ND		48	9.1	ug/L		07/11/19 17:18	07/18/19 22:24	5
Di-n-octyl phthalate	ND		48	2.1	ug/L		07/11/19 17:18	07/18/19 22:24	5
1,4-Dioxane	ND		48	4.8	ug/L		07/11/19 17:18	07/18/19 22:24	5
1,2-Diphenylhydrazine (as Azobenzene)	ND		48	4.8	ug/L		07/11/19 17:18	07/18/19 22:24	5
Hexachlorobenzene	ND	*	48	1.2	ug/L		07/11/19 17:18	07/18/19 22:24	5
Hexachlorocyclopentadiene	ND		96	12	ug/L		07/11/19 17:18	07/18/19 22:24	5
Hexachloroethane	ND		48	20	ug/L		07/11/19 17:18	07/18/19 22:24	5
Indene	ND		48	4.8	ug/L		07/11/19 17:18	07/18/19 22:24	5
Isophorone	ND		48	2.7	ug/L		07/11/19 17:18	07/18/19 22:24	5
2-Methylphenol	ND		48	8.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
3 & 4 Methylphenol	5.4	J	96	5.0	ug/L		07/11/19 17:18	07/18/19 22:24	5

Client Sample ID: P114R-ROX-070919
Date Collected: 07/09/19 09:35
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		48	11	ug/L		07/11/19 17:18	07/18/19 22:24	5
3-Nitroaniline	ND		48	8.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
4-Nitroaniline	ND	*	48	12	ug/L		07/11/19 17:18	07/18/19 22:24	5
Nitrobenzene	ND		48	2.6	ug/L		07/11/19 17:18	07/18/19 22:24	5
2-Nitrophenol	ND		48	3.1	ug/L		07/11/19 17:18	07/18/19 22:24	5
4-Nitrophenol	ND		48	10	ug/L		07/11/19 17:18	07/18/19 22:24	5
N-Nitrosodimethylamine	ND		48	17	ug/L		07/11/19 17:18	07/18/19 22:24	5
N-Nitrosodi-n-propylamine	ND		48	16	ug/L		07/11/19 17:18	07/18/19 22:24	5
N-Nitrosodiphenylamine	ND	UJ	48	2.3	ug/L		07/11/19 17:18	07/18/19 22:24	5
Pentachlorophenol	ND		96	8.7	ug/L		07/11/19 17:18	07/18/19 22:24	5
Phenol	ND		48	12	ug/L		07/11/19 17:18	07/18/19 22:24	5
Pyridine	ND		48	15	ug/L		07/11/19 17:18	07/18/19 22:24	5
Quinoline	ND		48	29	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,4,5-Trichlorophenol	ND		48	18	ug/L		07/11/19 17:18	07/18/19 22:24	5
2,4,6-Trichlorophenol	ND		48	17	ug/L		07/11/19 17:18	07/18/19 22:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*07/11/19 17:18*	*07/18/19 22:24*	*5*
2-Fluorophenol	*49*		*10 - 120*	*07/11/19 17:18*	*07/18/19 22:24*	*5*
Nitrobenzene-d5	*78*		*27 - 120*	*07/11/19 17:18*	*07/18/19 22:24*	*5*
Phenol-d5	*66*		*10 - 120*	*07/11/19 17:18*	*07/18/19 22:24*	*5*
Terphenyl-d14	*53*		*53 - 125*	*07/11/19 17:18*	*07/18/19 22:24*	*5*
2,4,6-Tribromophenol	*96*		*15 - 135*	*07/11/19 17:18*	*07/18/19 22:24*	*5*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.028	0.0052	ug/L		07/16/19 12:15	07/16/19 21:44	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		07/16/19 12:15	07/16/19 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/16/19 12:15*	*07/16/19 21:44*	*1*

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

Job ID: 400-172846-1

Client Sample ID: MW13-ROX-070919
Date Collected: 07/09/19 10:20
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-5
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			07/18/19 14:59	1
Acrolein	ND		20	10	ug/L			07/18/19 14:59	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 14:59	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 14:59	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 14:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 14:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 14:59	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 14:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 14:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 14:59	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 14:59	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 14:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 14:59	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 14:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 14:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 14:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 14:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 14:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 14:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 14:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 14:59	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 14:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 14:59	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 14:59	1
Methyl tert-butyl ether	1.7		1.0	0.74	ug/L			07/18/19 14:59	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 14:59	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 14:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 14:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 14:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 14:59	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 14:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 14:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 14:59	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 14:59	1

Client Sample ID: MW13-ROX-070919
Date Collected: 07/09/19 10:20
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-5
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			07/18/19 14:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 14:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 14:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 14:59	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 14:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 14:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 14:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 14:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 14:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 14:59	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 14:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 14:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 14:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 14:59	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 14:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 14:59	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*78 - 118*		*07/18/19 14:59*	*1*
Dibromofluoromethane	*109*		*81 - 121*		*07/18/19 14:59*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/18/19 14:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/19/19 17:53*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*07/19/19 17:53*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*07/19/19 17:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.0		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
Anthracene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Chrysene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1
Fluoranthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
Fluorene	0.51		0.19	0.020	ug/L		07/11/19 17:18	07/18/19 23:31	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 23:31	1

Client Sample ID: MW13-ROX-070919
Date Collected: 07/09/19 10:20
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
Pyrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
1-Methylnaphthalene	0.47		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*33 - 138*	*07/11/19 17:18*	*07/18/19 23:31*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*07/11/19 17:18*	*07/18/19 23:31*	*1*
Nitrobenzene-d5	*72*		*19 - 130*	*07/11/19 17:18*	*07/18/19 23:31*	*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		07/11/19 17:18	07/18/19 22:45	1
Benzenethiol	ND	*	9.5	1.6	ug/L		07/11/19 17:18	07/18/19 22:45	1
Benzoic acid	ND		29	7.0	ug/L		07/11/19 17:18	07/18/19 22:45	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/11/19 17:18	07/18/19 22:45	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		07/11/19 17:18	07/18/19 22:45	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		07/11/19 17:18	07/18/19 22:45	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		07/11/19 17:18	07/18/19 22:45	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/11/19 17:18	07/18/19 22:45	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		07/11/19 17:18	07/18/19 22:45	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		07/11/19 17:18	07/18/19 22:45	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/11/19 17:18	07/18/19 22:45	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/11/19 17:18	07/18/19 22:45	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		07/11/19 17:18	07/18/19 22:45	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/11/19 17:18	07/18/19 22:45	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/11/19 17:18	07/18/19 22:45	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		07/11/19 17:18	07/18/19 22:45	1
Dibenzofuran	ND		9.5	0.50	ug/L		07/11/19 17:18	07/18/19 22:45	1
3,3'-Dichlorobenzidine	ND	*	9.5	2.5	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/11/19 17:18	07/18/19 22:45	1
Diethyl phthalate	ND		9.5	0.67	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/11/19 17:18	07/18/19 22:45	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		07/11/19 17:18	07/18/19 22:45	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/11/19 17:18	07/18/19 22:45	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/11/19 17:18	07/18/19 22:45	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		07/11/19 17:18	07/18/19 22:45	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/11/19 17:18	07/18/19 22:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/11/19 17:18	07/18/19 22:45	1
Hexachlorobenzene	ND	*	9.5	0.24	ug/L		07/11/19 17:18	07/18/19 22:45	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/11/19 17:18	07/18/19 22:45	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/11/19 17:18	07/18/19 22:45	1
Indene	ND		9.5	0.95	ug/L		07/11/19 17:18	07/18/19 22:45	1
Isophorone	ND		9.5	0.54	ug/L		07/11/19 17:18	07/18/19 22:45	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/11/19 17:18	07/18/19 22:45	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		07/11/19 17:18	07/18/19 22:45	1

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

Job ID: 400-172846-1

Client Sample ID: MW13-ROX-070919
Date Collected: 07/09/19 10:20
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.5	2.1	ug/L		07/11/19 17:18	07/18/19 22:45	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/11/19 17:18	07/18/19 22:45	1
4-Nitroaniline	ND	*	9.5	2.4	ug/L		07/11/19 17:18	07/18/19 22:45	1
Nitrobenzene	ND		9.5	0.52	ug/L		07/11/19 17:18	07/18/19 22:45	1
2-Nitrophenol	ND		9.5	0.62	ug/L		07/11/19 17:18	07/18/19 22:45	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/11/19 17:18	07/18/19 22:45	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/11/19 17:18	07/18/19 22:45	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/11/19 17:18	07/18/19 22:45	1
N-Nitrosodiphenylamine	ND	UJ	9.5	0.45	ug/L		07/11/19 17:18	07/18/19 22:45	1
Pentachlorophenol	ND		19	1.7	ug/L		07/11/19 17:18	07/18/19 22:45	1
Phenol	ND		9.5	2.5	ug/L		07/11/19 17:18	07/18/19 22:45	1
Pyridine	ND		9.5	3.0	ug/L		07/11/19 17:18	07/18/19 22:45	1
Quinoline	ND		9.5	5.7	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/11/19 17:18	07/18/19 22:45	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/11/19 17:18	07/18/19 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 120*	*07/11/19 17:18*	*07/18/19 22:45*	*1*
2-Fluorophenol	*62*		*10 - 120*	*07/11/19 17:18*	*07/18/19 22:45*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*07/11/19 17:18*	*07/18/19 22:45*	*1*
Phenol-d5	*73*		*10 - 120*	*07/11/19 17:18*	*07/18/19 22:45*	*1*
Terphenyl-d14	*65*		*53 - 125*	*07/11/19 17:18*	*07/18/19 22:45*	*1*
2,4,6-Tribromophenol	*95*		*15 - 135*	*07/11/19 17:18*	*07/18/19 22:45*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		07/16/19 12:15	07/16/19 22:07	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/16/19 12:15	07/16/19 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*134*		*51 - 149*	*07/16/19 12:15*	*07/16/19 22:07*	*1*

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

Job ID: 400-172846-1

Client Sample ID: MW16-ROX-070919
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-6
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			07/18/19 09:38	1
Acrolein	ND		20	10	ug/L			07/18/19 09:38	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 09:38	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 09:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 09:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 09:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 09:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 09:38	1
2-Butanone (MEK)	ND	F1 UJ	25	2.6	ug/L			07/18/19 09:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 09:38	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 09:38	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 09:38	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 09:38	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 09:38	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 09:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 09:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 09:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 09:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 09:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 09:38	1
Hexachlorobutadiene	ND	F2	5.0	0.90	ug/L			07/18/19 09:38	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 09:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 09:38	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 09:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 09:38	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 09:38	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 09:38	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 09:38	1
n-Butylbenzene	ND	F2	1.0	0.76	ug/L			07/18/19 09:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 09:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 09:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 09:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 09:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 09:38	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 09:38	1

Client Sample ID: MW16-ROX-070919
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-6
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			07/18/19 09:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 09:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 09:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 09:38	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 09:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 09:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 09:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 09:38	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 09:38	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 09:38	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 09:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 09:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 09:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 09:38	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 09:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 09:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 09:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*78 - 118*		*07/18/19 09:38*	*1*
Dibromofluoromethane	*112*		*81 - 121*		*07/18/19 09:38*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/18/19 09:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*78 - 118*		*07/19/19 10:04*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*07/19/19 10:04*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/19/19 10:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
Anthracene	0.036	J	0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Benzo[a]pyrene	ND	*	0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Benzo[b]fluoranthene	ND	*	0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Benzo[g,h,i]perylene	ND	*	0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Benzo[k]fluoranthene	ND	*	0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Chrysene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Dibenz(a,h)anthracene	ND	*	0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1
Fluoranthene	0.053	J	0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
Fluorene	ND		0.19	0.020	ug/L		07/11/19 17:18	07/18/19 10:50	1
Indeno[1,2,3-cd]pyrene	ND	*	0.19	0.038	ug/L		07/11/19 17:18	07/18/19 10:50	1

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

Job ID: 400-172846-1

Client Sample ID: MW16-ROX-070919
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-6
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	0.029	J	0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
Pyrene	0.038	J	0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1
2-Methylnaphthalene	0.030	J	0.19	0.019	ug/L		07/11/19 17:18	07/18/19 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*116*		*33 - 138*	*07/11/19 17:18*	*07/18/19 10:50*	*1*
2-Fluorobiphenyl	*98*		*15 - 122*	*07/11/19 17:18*	*07/18/19 10:50*	*1*
Nitrobenzene-d5	*88*		*19 - 130*	*07/11/19 17:18*	*07/18/19 10:50*	*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		07/11/19 17:18	07/18/19 01:23	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/11/19 17:18	07/18/19 01:23	1
Benzoic acid	ND		29	7.0	ug/L		07/11/19 17:18	07/18/19 01:23	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 01:23	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/11/19 17:18	07/18/19 01:23	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/11/19 17:18	07/18/19 01:23	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/11/19 17:18	07/18/19 01:23	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/11/19 17:18	07/18/19 01:23	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/11/19 17:18	07/18/19 01:23	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/11/19 17:18	07/18/19 01:23	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 01:23	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/11/19 17:18	07/18/19 01:23	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/11/19 17:18	07/18/19 01:23	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/11/19 17:18	07/18/19 01:23	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 01:23	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/11/19 17:18	07/18/19 01:23	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/11/19 17:18	07/18/19 01:23	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/11/19 17:18	07/18/19 01:23	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 01:23	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		07/11/19 17:18	07/18/19 01:23	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/11/19 17:18	07/18/19 01:23	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/11/19 17:18	07/18/19 01:23	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/11/19 17:18	07/18/19 01:23	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 01:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 01:23	1
Hexachlorobenzene	ND	*	9.6	0.24	ug/L		07/11/19 17:18	07/18/19 01:23	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/11/19 17:18	07/18/19 01:23	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/11/19 17:18	07/18/19 01:23	1
Indene	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 01:23	1
Isophorone	ND		9.6	0.55	ug/L		07/11/19 17:18	07/18/19 01:23	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/11/19 17:18	07/18/19 01:23	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/11/19 17:18	07/18/19 01:23	1

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

Job ID: 400-172846-1

Client Sample ID: MW16-ROX-070919
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-6
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		07/11/19 17:18	07/18/19 01:23	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/11/19 17:18	07/18/19 01:23	1
4-Nitroaniline	ND	*	9.6	2.4	ug/L		07/11/19 17:18	07/18/19 01:23	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/11/19 17:18	07/18/19 01:23	1
2-Nitrophenol	ND		9.6	0.62	ug/L		07/11/19 17:18	07/18/19 01:23	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/11/19 17:18	07/18/19 01:23	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 01:23	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/11/19 17:18	07/18/19 01:23	1
N-Nitrosodiphenylamine	ND	UJ	9.6	0.45	ug/L		07/11/19 17:18	07/18/19 01:23	1
Pentachlorophenol	ND		19	1.7	ug/L		07/11/19 17:18	07/18/19 01:23	1
Phenol	ND		9.6	2.5	ug/L		07/11/19 17:18	07/18/19 01:23	1
Pyridine	ND	UJ	9.6	3.1	ug/L		07/11/19 17:18	07/18/19 01:23	1
Quinoline	ND		9.6	5.7	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/11/19 17:18	07/18/19 01:23	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*07/11/19 17:18*	*07/18/19 01:23*	*1*
2-Fluorophenol	*39*		*10 - 120*	*07/11/19 17:18*	*07/18/19 01:23*	*1*
Nitrobenzene-d5	*58*		*27 - 120*	*07/11/19 17:18*	*07/18/19 01:23*	*1*
Phenol-d5	*47*		*10 - 120*	*07/11/19 17:18*	*07/18/19 01:23*	*1*
Terphenyl-d14	*94*		*53 - 125*	*07/11/19 17:18*	*07/18/19 01:23*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*07/11/19 17:18*	*07/18/19 01:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	F1	0.028	0.0052	ug/L		07/16/19 12:15	07/16/19 22:30	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		07/16/19 12:15	07/16/19 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*07/16/19 12:15*	*07/16/19 22:30*	*1*

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

Job ID: 400-172846-1

Client Sample ID: MW2-ROX-070919
Date Collected: 07/09/19 12:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-7
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			07/18/19 10:52	5
Acrolein	ND		100	50	ug/L			07/18/19 10:52	5
Acrylonitrile	ND	*	50	14	ug/L			07/18/19 10:52	5
Benzene	ND		5.0	1.9	ug/L			07/18/19 10:52	5
Bromobenzene	ND		5.0	2.7	ug/L			07/18/19 10:52	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/18/19 10:52	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Bromoform	ND		25	3.6	ug/L			07/18/19 10:52	5
Bromomethane	ND		5.0	4.9	ug/L			07/18/19 10:52	5
2-Butanone (MEK)	ND		130	13	ug/L			07/18/19 10:52	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Dibromochloromethane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Chloroethane	ND		5.0	3.8	ug/L			07/18/19 10:52	5
2-Chloroethyl vinyl ether	ND	*	25	10	ug/L			07/18/19 10:52	5
Chloroform	ND		5.0	3.0	ug/L			07/18/19 10:52	5
1-Chlorohexane	ND		5.0	3.5	ug/L			07/18/19 10:52	5
Chloromethane	ND		5.0	4.2	ug/L			07/18/19 10:52	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/18/19 10:52	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/18/19 10:52	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/18/19 10:52	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/18/19 10:52	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
1,2-Dichloroethane	ND	*	5.0	2.5	ug/L			07/18/19 10:52	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Ethylbenzene	1200		5.0	2.5	ug/L			07/18/19 10:52	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/18/19 10:52	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/18/19 10:52	5
2-Hexanone	ND		130	16	ug/L			07/18/19 10:52	5
Isopropylbenzene	74		5.0	2.7	ug/L			07/18/19 10:52	5
Methylene bromide	ND		25	3.0	ug/L			07/18/19 10:52	5
Methylene Chloride	ND		25	15	ug/L			07/18/19 10:52	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/18/19 10:52	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			07/18/19 10:52	5
m-Xylene & p-Xylene	780		25	8.0	ug/L			07/18/19 10:52	5
Naphthalene	64		5.0	5.0	ug/L			07/18/19 10:52	5
n-Butylbenzene	11		5.0	3.8	ug/L			07/18/19 10:52	5
N-Propylbenzene	110		5.0	3.5	ug/L			07/18/19 10:52	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/18/19 10:52	5
o-Xylene	63		25	3.0	ug/L			07/18/19 10:52	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/18/19 10:52	5
p-Isopropyltoluene	6.8		5.0	3.6	ug/L			07/18/19 10:52	5

Client Sample ID: MW2-ROX-070919
Date Collected: 07/09/19 12:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	6.6		5.0	3.5	ug/L			07/18/19 10:52	5
Styrene	ND		5.0	5.0	ug/L			07/18/19 10:52	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/18/19 10:52	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			07/18/19 10:52	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Tetrachloroethene	ND		5.0	2.9	ug/L			07/18/19 10:52	5
Toluene	9.2		5.0	2.1	ug/L			07/18/19 10:52	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			07/18/19 10:52	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			07/18/19 10:52	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/18/19 10:52	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			07/18/19 10:52	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			07/18/19 10:52	5
Trichloroethene	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			07/18/19 10:52	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/18/19 10:52	5
1,2,4-Trimethylbenzene	360		5.0	4.1	ug/L			07/18/19 10:52	5
1,3,5-Trimethylbenzene	110		5.0	2.8	ug/L			07/18/19 10:52	5
Vinyl acetate	ND		130	10	ug/L			07/18/19 10:52	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/18/19 10:52	5
Xylenes, Total	840		50	8.0	ug/L			07/18/19 10:52	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/18/19 10:52*	*5*
Dibromofluoromethane	*110*		*81 - 121*		*07/18/19 10:52*	*5*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/18/19 10:52*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
Anthracene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Chrysene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Fluoranthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
Fluorene	ND		0.19	0.020	ug/L		07/11/19 17:18	07/19/19 07:18	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:18	1
Phenanthrene	0.021	J	0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
Pyrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
1-Methylnaphthalene	16		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1
2-Methylnaphthalene	31		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*107*		*33 - 138*	*07/11/19 17:18*	*07/19/19 07:18*	*1*
2-Fluorobiphenyl	*81*		*15 - 122*	*07/11/19 17:18*	*07/19/19 07:18*	*1*

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

Job ID: 400-172846-1

Client Sample ID: MW2-ROX-070919
Date Collected: 07/09/19 12:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		19 - 130	07/11/19 17:18	07/19/19 07:18	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		07/11/19 17:18	07/18/19 23:27	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		07/11/19 17:18	07/18/19 23:27	1
Benzoic acid	ND		29	7.0	ug/L		07/11/19 17:18	07/18/19 23:27	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/11/19 17:18	07/18/19 23:27	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		07/11/19 17:18	07/18/19 23:27	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		07/11/19 17:18	07/18/19 23:27	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		07/11/19 17:18	07/18/19 23:27	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/11/19 17:18	07/18/19 23:27	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		07/11/19 17:18	07/18/19 23:27	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		07/11/19 17:18	07/18/19 23:27	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/11/19 17:18	07/18/19 23:27	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/11/19 17:18	07/18/19 23:27	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		07/11/19 17:18	07/18/19 23:27	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/11/19 17:18	07/18/19 23:27	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/11/19 17:18	07/18/19 23:27	1
Dibenz[a,h]acridine	ND	UJ	9.5	2.9	ug/L		07/11/19 17:18	07/18/19 23:27	1
Dibenzofuran	ND		9.5	0.50	ug/L		07/11/19 17:18	07/18/19 23:27	1
3,3'-Dichlorobenzidine	ND	*	9.5	2.5	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/11/19 17:18	07/18/19 23:27	1
Diethyl phthalate	ND		9.5	0.67	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/11/19 17:18	07/18/19 23:27	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		07/11/19 17:18	07/18/19 23:27	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/11/19 17:18	07/18/19 23:27	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/11/19 17:18	07/18/19 23:27	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		07/11/19 17:18	07/18/19 23:27	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/11/19 17:18	07/18/19 23:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/11/19 17:18	07/18/19 23:27	1
Hexachlorobenzene	ND	*	9.5	0.24	ug/L		07/11/19 17:18	07/18/19 23:27	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/11/19 17:18	07/18/19 23:27	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/11/19 17:18	07/18/19 23:27	1
Indene	ND		9.5	0.95	ug/L		07/11/19 17:18	07/18/19 23:27	1
Isophorone	ND		9.5	0.54	ug/L		07/11/19 17:18	07/18/19 23:27	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/11/19 17:18	07/18/19 23:27	1
3 & 4 Methylphenol	4.9	J	19	0.99	ug/L		07/11/19 17:18	07/18/19 23:27	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/11/19 17:18	07/18/19 23:27	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/11/19 17:18	07/18/19 23:27	1
4-Nitroaniline	ND	*	9.5	2.4	ug/L		07/11/19 17:18	07/18/19 23:27	1
Nitrobenzene	ND		9.5	0.52	ug/L		07/11/19 17:18	07/18/19 23:27	1
2-Nitrophenol	ND		9.5	0.62	ug/L		07/11/19 17:18	07/18/19 23:27	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/11/19 17:18	07/18/19 23:27	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/11/19 17:18	07/18/19 23:27	1

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

Job ID: 400-172846-1

Client Sample ID: MW2-ROX-070919
Date Collected: 07/09/19 12:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-7
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		9.5	3.1	ug/L		07/11/19 17:18	07/18/19 23:27	1
N-Nitrosodiphenylamine	ND	UJ	9.5	0.45	ug/L		07/11/19 17:18	07/18/19 23:27	1
Pentachlorophenol	ND		19	1.7	ug/L		07/11/19 17:18	07/18/19 23:27	1
Phenol	ND		9.5	2.5	ug/L		07/11/19 17:18	07/18/19 23:27	1
Pyridine	ND		9.5	3.1	ug/L		07/11/19 17:18	07/18/19 23:27	1
Quinoline	ND		9.5	5.7	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/11/19 17:18	07/18/19 23:27	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/11/19 17:18	07/18/19 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*07/11/19 17:18*	*07/18/19 23:27*	*1*
2-Fluorophenol	*24*		*10 - 120*	*07/11/19 17:18*	*07/18/19 23:27*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*07/11/19 17:18*	*07/18/19 23:27*	*1*
Phenol-d5	*63*		*10 - 120*	*07/11/19 17:18*	*07/18/19 23:27*	*1*
Terphenyl-d14	*79*		*53 - 125*	*07/11/19 17:18*	*07/18/19 23:27*	*1*
2,4,6-Tribromophenol	*108*		*15 - 135*	*07/11/19 17:18*	*07/18/19 23:27*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0057	ug/L		07/16/19 12:15	07/16/19 23:37	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		07/16/19 12:15	07/16/19 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*51 - 149*	*07/16/19 12:15*	*07/16/19 23:37*	*1*

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

Job ID: 400-172846-1

Client Sample ID: TB-ROX-070919-8260-A
Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-8
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			07/18/19 12:32	1
Acrolein	ND		20	10	ug/L			07/18/19 12:32	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 12:32	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 12:32	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 12:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 12:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 12:32	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 12:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 12:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 12:32	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 12:32	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 12:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 12:32	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 12:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 12:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 12:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 12:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 12:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 12:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 12:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 12:32	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 12:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 12:32	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 12:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 12:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 12:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 12:32	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 12:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 12:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 12:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 12:32	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 12:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 12:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 12:32	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 12:32	1

Client Sample ID: TB-ROX-070919-8260-A
Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-8
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			07/18/19 12:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 12:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 12:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 12:32	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 12:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 12:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 12:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 12:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 12:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 12:32	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 12:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 12:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 12:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 12:32	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 12:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 12:32	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/18/19 12:32*	*1*
Dibromofluoromethane	*114*		*81 - 121*		*07/18/19 12:32*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/18/19 12:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/19/19 14:33*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*07/19/19 14:33*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*07/19/19 14:33*	*1*

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

Job ID: 400-172846-1

Client Sample ID: TB-ROX-070919-8011-A
Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-9
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		0.029	0.0054	ug/L		07/16/19 12:15	07/17/19 00:00	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/16/19 12:15	07/17/19 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*51 - 149*	*07/16/19 12:15*	*07/17/19 00:00*	*1*

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

Job ID: 400-172846-1

Client Sample ID: P54-ROX-070919-EB
Date Collected: 07/09/19 09:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-10
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			07/18/19 15:25	1
Acrolein	ND		20	10	ug/L			07/18/19 15:25	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 15:25	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 15:25	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 15:25	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 15:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 15:25	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 15:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 15:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 15:25	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 15:25	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 15:25	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 15:25	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 15:25	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 15:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 15:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 15:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 15:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 15:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 15:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 15:25	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 15:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 15:25	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 15:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 15:25	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 15:25	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 15:25	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 15:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 15:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 15:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 15:25	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 15:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 15:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 15:25	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 15:25	1

Client Sample ID: P54-ROX-070919-EB
Date Collected: 07/09/19 09:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	1.0	ug/L			07/18/19 15:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 15:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 15:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 15:25	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 15:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 15:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 15:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 15:25	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 15:25	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 15:25	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 15:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 15:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 15:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 15:25	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 15:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 15:25	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*07/18/19 15:25*	*1*
Dibromofluoromethane	*113*		*81 - 121*		*07/18/19 15:25*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/18/19 15:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/19/19 18:19*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*07/19/19 18:19*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/19/19 18:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
Anthracene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Chrysene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1
Fluoranthene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
Fluorene	ND		0.19	0.020	ug/L		07/11/19 17:18	07/19/19 07:34	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/11/19 17:18	07/19/19 07:34	1

Client Sample ID: P54-ROX-070919-EB

Lab Sample ID: 400-172846-10

Date Collected: 07/09/19 09:45
Date Received: 07/10/19 08:59

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
Pyrene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/11/19 17:18	07/19/19 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*117*		*33 - 138*	*07/11/19 17:18*	*07/19/19 07:34*	*1*
2-Fluorobiphenyl	*80*		*15 - 122*	*07/11/19 17:18*	*07/19/19 07:34*	*1*
Nitrobenzene-d5	*74*		*19 - 130*	*07/11/19 17:18*	*07/19/19 07:34*	*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		07/11/19 17:18	07/18/19 23:48	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzoic acid	ND		29	7.0	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 23:48	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/11/19 17:18	07/18/19 23:48	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/11/19 17:18	07/18/19 23:48	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		07/11/19 17:18	07/18/19 23:48	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/11/19 17:18	07/18/19 23:48	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/11/19 17:18	07/18/19 23:48	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/11/19 17:18	07/18/19 23:48	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 23:48	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/11/19 17:18	07/18/19 23:48	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/11/19 17:18	07/18/19 23:48	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/11/19 17:18	07/18/19 23:48	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 23:48	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/11/19 17:18	07/18/19 23:48	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/11/19 17:18	07/18/19 23:48	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/11/19 17:18	07/18/19 23:48	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 23:48	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		07/11/19 17:18	07/18/19 23:48	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/11/19 17:18	07/18/19 23:48	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/11/19 17:18	07/18/19 23:48	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/11/19 17:18	07/18/19 23:48	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 23:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 23:48	1
Hexachlorobenzene	ND	*	9.6	0.24	ug/L		07/11/19 17:18	07/18/19 23:48	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/11/19 17:18	07/18/19 23:48	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/11/19 17:18	07/18/19 23:48	1
Indene	ND		9.6	0.96	ug/L		07/11/19 17:18	07/18/19 23:48	1
Isophorone	ND		9.6	0.55	ug/L		07/11/19 17:18	07/18/19 23:48	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/11/19 17:18	07/18/19 23:48	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		07/11/19 17:18	07/18/19 23:48	1

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

Job ID: 400-172846-1

Client Sample ID: P54-ROX-070919-EB
Date Collected: 07/09/19 09:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.6	2.1	ug/L		07/11/19 17:18	07/18/19 23:48	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/11/19 17:18	07/18/19 23:48	1
4-Nitroaniline	ND	*	9.6	2.4	ug/L		07/11/19 17:18	07/18/19 23:48	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/11/19 17:18	07/18/19 23:48	1
2-Nitrophenol	ND		9.6	0.62	ug/L		07/11/19 17:18	07/18/19 23:48	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/11/19 17:18	07/18/19 23:48	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 23:48	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/11/19 17:18	07/18/19 23:48	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/11/19 17:18	07/18/19 23:48	1
Pentachlorophenol	ND		19	1.7	ug/L		07/11/19 17:18	07/18/19 23:48	1
Phenol	ND		9.6	2.5	ug/L		07/11/19 17:18	07/18/19 23:48	1
Pyridine	ND		9.6	3.1	ug/L		07/11/19 17:18	07/18/19 23:48	1
Quinoline	ND		9.6	5.7	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/11/19 17:18	07/18/19 23:48	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/11/19 17:18	07/18/19 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
2-Fluorophenol	*53*		*10 - 120*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
Phenol-d5	*70*		*10 - 120*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
Terphenyl-d14	*84*		*53 - 125*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
2,4,6-Tribromophenol	*75*		*15 - 135*	*07/11/19 17:18*	*07/18/19 23:48*	*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		0.029	0.0053	ug/L		07/16/19 12:15	07/17/19 00:22	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/16/19 12:15	07/17/19 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*07/16/19 12:15*	*07/17/19 00:22*	*1*

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

Job ID: 400-172846-1

Client Sample ID: P54-ROX-070919
Date Collected: 07/09/19 10:25
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-11
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			07/18/19 15:51	1
Acrolein	ND		20	10	ug/L			07/18/19 15:51	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 15:51	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 15:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 15:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 15:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 15:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 15:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 15:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 15:51	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 15:51	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 15:51	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 15:51	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 15:51	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 15:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 15:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 15:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 15:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 15:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 15:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 15:51	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 15:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 15:51	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 15:51	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 15:51	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 15:51	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 15:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 15:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 15:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 15:51	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 15:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 15:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 15:51	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 15:51	1

Client Sample ID: P54-ROX-070919
Date Collected: 07/09/19 10:25
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-11
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			07/18/19 15:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 15:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 15:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 15:51	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 15:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 15:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 15:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 15:51	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 15:51	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 15:51	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 15:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 15:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 15:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 15:51	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 15:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 15:51	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*	*X*	*78 - 118*		*07/18/19 15:51*	*1*
Dibromofluoromethane	*114*		*81 - 121*		*07/18/19 15:51*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/18/19 15:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*78 - 118*		*07/19/19 18:45*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*07/19/19 18:45*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/19/19 18:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
Anthracene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Chrysene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1
Fluoranthene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
Fluorene	ND		0.20	0.021	ug/L		07/11/19 17:18	07/18/19 21:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 21:25	1

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

Job ID: 400-172846-1

Client Sample ID: P54-ROX-070919
Date Collected: 07/09/19 10:25
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
Pyrene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
1-Methylnaphthalene	0.022	J	0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1
2-Methylnaphthalene	0.023	J	0.20	0.020	ug/L		07/11/19 17:18	07/18/19 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*33 - 138*	*07/11/19 17:18*	*07/18/19 21:25*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*07/11/19 17:18*	*07/18/19 21:25*	*1*
Nitrobenzene-d5	*67*		*19 - 130*	*07/11/19 17:18*	*07/18/19 21:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/11/19 17:18	07/19/19 00:09	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/11/19 17:18	07/19/19 00:09	1
Benzoic acid	ND		30	7.4	ug/L		07/11/19 17:18	07/19/19 00:09	1
Benzyl alcohol	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/11/19 17:18	07/19/19 00:09	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		07/11/19 17:18	07/19/19 00:09	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/11/19 17:18	07/19/19 00:09	1
Bis(2-ethylhexyl) phthalate	~~9.5~~	J B U	10	5.1	ug/L		07/11/19 17:18	07/19/19 00:09	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/11/19 17:18	07/19/19 00:09	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/11/19 17:18	07/19/19 00:09	1
4-Chloroaniline	ND		10	3.4	ug/L		07/11/19 17:18	07/19/19 00:09	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/11/19 17:18	07/19/19 00:09	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/11/19 17:18	07/19/19 00:09	1
2-Chlorophenol	ND		10	2.2	ug/L		07/11/19 17:18	07/19/19 00:09	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
Dibenz[a,h]acridine	ND	UJ	10	3.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
Dibenzofuran	ND		10	0.53	ug/L		07/11/19 17:18	07/19/19 00:09	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
Diethyl phthalate	ND		10	0.71	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/11/19 17:18	07/19/19 00:09	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/11/19 17:18	07/19/19 00:09	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/11/19 17:18	07/19/19 00:09	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 00:09	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/11/19 17:18	07/19/19 00:09	1
1,4-Dioxane	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
Hexachlorobenzene	ND	*	10	0.25	ug/L		07/11/19 17:18	07/19/19 00:09	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/11/19 17:18	07/19/19 00:09	1
Hexachloroethane	ND		10	4.2	ug/L		07/11/19 17:18	07/19/19 00:09	1
Indene	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:09	1
Isophorone	ND		10	0.58	ug/L		07/11/19 17:18	07/19/19 00:09	1
2-Methylphenol	ND		10	1.8	ug/L		07/11/19 17:18	07/19/19 00:09	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/11/19 17:18	07/19/19 00:09	1

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

Job ID: 400-172846-1

Client Sample ID: P54-ROX-070919
Date Collected: 07/09/19 10:25
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/11/19 17:18	07/19/19 00:09	1
3-Nitroaniline	ND		10	1.8	ug/L		07/11/19 17:18	07/19/19 00:09	1
4-Nitroaniline	ND	*	10	2.5	ug/L		07/11/19 17:18	07/19/19 00:09	1
Nitrobenzene	ND		10	0.56	ug/L		07/11/19 17:18	07/19/19 00:09	1
2-Nitrophenol	ND		10	0.66	ug/L		07/11/19 17:18	07/19/19 00:09	1
4-Nitrophenol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:09	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/11/19 17:18	07/19/19 00:09	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/11/19 17:18	07/19/19 00:09	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/11/19 17:18	07/19/19 00:09	1
Pentachlorophenol	ND		20	1.8	ug/L		07/11/19 17:18	07/19/19 00:09	1
Phenol	ND		10	2.6	ug/L		07/11/19 17:18	07/19/19 00:09	1
Pyridine	ND		10	3.2	ug/L		07/11/19 17:18	07/19/19 00:09	1
Quinoline	ND		10	6.1	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/11/19 17:18	07/19/19 00:09	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/11/19 17:18	07/19/19 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*34 - 120*	*07/11/19 17:18*	*07/19/19 00:09*	*1*
2-Fluorophenol	*41*		*10 - 120*	*07/11/19 17:18*	*07/19/19 00:09*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*07/11/19 17:18*	*07/19/19 00:09*	*1*
Phenol-d5	*60*		*10 - 120*	*07/11/19 17:18*	*07/19/19 00:09*	*1*
Terphenyl-d14	*76*		*53 - 125*	*07/11/19 17:18*	*07/19/19 00:09*	*1*
2,4,6-Tribromophenol	*61*		*15 - 135*	*07/11/19 17:18*	*07/19/19 00:09*	*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		0.029	0.0053	ug/L		07/16/19 12:15	07/17/19 00:45	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/16/19 12:15	07/17/19 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*51 - 149*	*07/16/19 12:15*	*07/17/19 00:45*	*1*

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

Job ID: 400-172846-1

Client Sample ID: MW24-ROX-070919
Date Collected: 07/09/19 11:15
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-12
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			07/18/19 16:15	1
Acrolein	ND		20	10	ug/L			07/18/19 16:15	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 16:15	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 16:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 16:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 16:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 16:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 16:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 16:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 16:15	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 16:15	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 16:15	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 16:15	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 16:15	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 16:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 16:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 16:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 16:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 16:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 16:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 16:15	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 16:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 16:15	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 16:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 16:15	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 16:15	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 16:15	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 16:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 16:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 16:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 16:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 16:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 16:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 16:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 16:15	1

Client Sample ID: MW24-ROX-070919
Date Collected: 07/09/19 11:15
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-12
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			07/18/19 16:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 16:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 16:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 16:15	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 16:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 16:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 16:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 16:15	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 16:15	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 16:15	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 16:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 16:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 16:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 16:15	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 16:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 16:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/18/19 16:15*	*1*
Dibromofluoromethane	*110*		*81 - 121*		*07/18/19 16:15*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/18/19 16:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/19 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/22/19 16:45*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*07/22/19 16:45*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/22/19 16:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
Acenaphthylene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
Anthracene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
Benzo[a]anthracene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Benzo[a]pyrene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Benzo[b]fluoranthene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Benzo[g,h,i]perylene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Benzo[k]fluoranthene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Chrysene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Dibenz(a,h)anthracene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1
Fluoranthene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
Fluorene	ND		0.21	0.022	ug/L		07/11/19 17:18	07/18/19 21:40	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 21:40	1

Client Sample ID: MW24-ROX-070919
Date Collected: 07/09/19 11:15
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
Pyrene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1
2-Methylnaphthalene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*121*		*33 - 138*	*07/11/19 17:18*	*07/18/19 21:40*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*07/11/19 17:18*	*07/18/19 21:40*	*1*
Nitrobenzene-d5	*74*		*19 - 130*	*07/11/19 17:18*	*07/18/19 21:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/11/19 17:18	07/19/19 00:30	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/11/19 17:18	07/19/19 00:30	1
Benzoic acid	ND		31	7.5	ug/L		07/11/19 17:18	07/19/19 00:30	1
Benzyl alcohol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:30	1
Bis(2-chloroethoxy)methane	ND		10	0.71	ug/L		07/11/19 17:18	07/19/19 00:30	1
Bis(2-chloroethyl)ether	ND		10	0.76	ug/L		07/11/19 17:18	07/19/19 00:30	1
bis (2-chloroisopropyl) ether	ND		10	0.83	ug/L		07/11/19 17:18	07/19/19 00:30	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/11/19 17:18	07/19/19 00:30	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		07/11/19 17:18	07/19/19 00:30	1
Butyl benzyl phthalate	ND		10	0.71	ug/L		07/11/19 17:18	07/19/19 00:30	1
4-Chloroaniline	ND		10	3.5	ug/L		07/11/19 17:18	07/19/19 00:30	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/11/19 17:18	07/19/19 00:30	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/11/19 17:18	07/19/19 00:30	1
2-Chlorophenol	ND		10	2.3	ug/L		07/11/19 17:18	07/19/19 00:30	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:30	1
Dibenz[a,h]acridine	ND	UJ	10	3.1	ug/L		07/11/19 17:18	07/19/19 00:30	1
Dibenzofuran	ND		10	0.53	ug/L		07/11/19 17:18	07/19/19 00:30	1
3,3'-Dichlorobenzidine	ND	*	10	2.7	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/11/19 17:18	07/19/19 00:30	1
Diethyl phthalate	ND		10	0.72	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 00:30	1
Dimethyl phthalate	ND		10	0.62	ug/L		07/11/19 17:18	07/19/19 00:30	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/11/19 17:18	07/19/19 00:30	1
4,6-Dinitro-ortho-cresol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:30	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		07/11/19 17:18	07/19/19 00:30	1
1,4-Dioxane	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:30	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:30	1
Hexachlorobenzene	ND	*	10	0.26	ug/L		07/11/19 17:18	07/19/19 00:30	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/11/19 17:18	07/19/19 00:30	1
Hexachloroethane	ND		10	4.3	ug/L		07/11/19 17:18	07/19/19 00:30	1
Indene	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:30	1
Isophorone	ND		10	0.59	ug/L		07/11/19 17:18	07/19/19 00:30	1
2-Methylphenol	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 00:30	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/11/19 17:18	07/19/19 00:30	1

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

Job ID: 400-172846-1

Client Sample ID: MW24-ROX-070919
Date Collected: 07/09/19 11:15
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.3	ug/L		07/11/19 17:18	07/19/19 00:30	1
3-Nitroaniline	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 00:30	1
4-Nitroaniline	ND	*	10	2.5	ug/L		07/11/19 17:18	07/19/19 00:30	1
Nitrobenzene	ND		10	0.57	ug/L		07/11/19 17:18	07/19/19 00:30	1
2-Nitrophenol	ND		10	0.67	ug/L		07/11/19 17:18	07/19/19 00:30	1
4-Nitrophenol	ND		10	2.2	ug/L		07/11/19 17:18	07/19/19 00:30	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 00:30	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/11/19 17:18	07/19/19 00:30	1
N-Nitrosodiphenylamine	ND	us	10	0.48	ug/L		07/11/19 17:18	07/19/19 00:30	1
Pentachlorophenol	ND		21	1.9	ug/L		07/11/19 17:18	07/19/19 00:30	1
Phenol	ND		10	2.7	ug/L		07/11/19 17:18	07/19/19 00:30	1
Pyridine	ND		10	3.3	ug/L		07/11/19 17:18	07/19/19 00:30	1
Quinoline	ND		10	6.2	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/11/19 17:18	07/19/19 00:30	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*07/11/19 17:18*	*07/19/19 00:30*	*1*
2-Fluorophenol	*50*		*10 - 120*	*07/11/19 17:18*	*07/19/19 00:30*	*1*
Nitrobenzene-d5	*86*		*27 - 120*	*07/11/19 17:18*	*07/19/19 00:30*	*1*
Phenol-d5	*59*		*10 - 120*	*07/11/19 17:18*	*07/19/19 00:30*	*1*
Terphenyl-d14	*85*		*53 - 125*	*07/11/19 17:18*	*07/19/19 00:30*	*1*
2,4,6-Tribromophenol	*59*		*15 - 135*	*07/11/19 17:18*	*07/19/19 00:30*	*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		07/16/19 12:15	07/17/19 01:30	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/16/19 12:15	07/17/19 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*51 - 149*	*07/16/19 12:15*	*07/17/19 01:30*	*1*

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

Job ID: 400-172846-1

Client Sample ID: MW11-ROX-070919
Date Collected: 07/09/19 12:10
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-13
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			07/18/19 16:41	1
Acrolein	ND		20	10	ug/L			07/18/19 16:41	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 16:41	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 16:41	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 16:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 16:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 16:41	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 16:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 16:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 16:41	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 16:41	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 16:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 16:41	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 16:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 16:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 16:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 16:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 16:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 16:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 16:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 16:41	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 16:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 16:41	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 16:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 16:41	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 16:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 16:41	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 16:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 16:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 16:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 16:41	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 16:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 16:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 16:41	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 16:41	1

Client Sample ID: MW11-ROX-070919
Date Collected: 07/09/19 12:10
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-13
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			07/18/19 16:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 16:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 16:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 16:41	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 16:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 16:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 16:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 16:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 16:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 16:41	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 16:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 16:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 16:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 16:41	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 16:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 16:41	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/18/19 16:41*	*1*
Dibromofluoromethane	*112*		*81 - 121*		*07/18/19 16:41*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/18/19 16:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/19 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*07/22/19 17:11*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*07/22/19 17:11*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/22/19 17:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
Acenaphthylene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
Anthracene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
Benzo[a]anthracene	0.054	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Benzo[a]pyrene	0.062	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Benzo[b]fluoranthene	0.068	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Benzo[g,h,i]perylene	0.051	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Benzo[k]fluoranthene	0.060	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Chrysene	0.042	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Dibenz(a,h)anthracene	0.053	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1
Fluoranthene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
Fluorene	ND		0.21	0.022	ug/L		07/11/19 17:18	07/19/19 14:42	1
Indeno[1,2,3-cd]pyrene	0.053	J	0.21	0.042	ug/L		07/11/19 17:18	07/19/19 14:42	1

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

Job ID: 400-172846-1

Client Sample ID: MW11-ROX-070919
Date Collected: 07/09/19 12:10
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
Pyrene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1
2-Methylnaphthalene	0.027	J	0.21	0.021	ug/L		07/11/19 17:18	07/19/19 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*107*		*33 - 138*	*07/11/19 17:18*	*07/19/19 14:42*	*1*
2-Fluorobiphenyl	*75*		*15 - 122*	*07/11/19 17:18*	*07/19/19 14:42*	*1*
Nitrobenzene-d5	*67*		*19 - 130*	*07/11/19 17:18*	*07/19/19 14:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
Benzenethiol	ND	* UJ	10	1.8	ug/L		07/11/19 17:18	07/19/19 00:52	1
Benzoic acid	ND		31	7.6	ug/L		07/11/19 17:18	07/19/19 00:52	1
Benzyl alcohol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:52	1
Bis(2-chloroethoxy)methane	ND		10	0.72	ug/L		07/11/19 17:18	07/19/19 00:52	1
Bis(2-chloroethyl)ether	ND		10	0.77	ug/L		07/11/19 17:18	07/19/19 00:52	1
bis (2-chloroisopropyl) ether	ND		10	0.84	ug/L		07/11/19 17:18	07/19/19 00:52	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/11/19 17:18	07/19/19 00:52	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		07/11/19 17:18	07/19/19 00:52	1
Butyl benzyl phthalate	ND		10	0.72	ug/L		07/11/19 17:18	07/19/19 00:52	1
4-Chloroaniline	ND		10	3.5	ug/L		07/11/19 17:18	07/19/19 00:52	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
2-Chloronaphthalene	ND		10	0.54	ug/L		07/11/19 17:18	07/19/19 00:52	1
2-Chlorophenol	ND		10	2.3	ug/L		07/11/19 17:18	07/19/19 00:52	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:52	1
Dibenz[a,h]acridine	ND	UJ	10	3.1	ug/L		07/11/19 17:18	07/19/19 00:52	1
Dibenzofuran	ND		10	0.54	ug/L		07/11/19 17:18	07/19/19 00:52	1
3,3'-Dichlorobenzidine	ND	*	10	2.7	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/11/19 17:18	07/19/19 00:52	1
Diethyl phthalate	ND		10	0.73	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 00:52	1
Dimethyl phthalate	ND		10	0.62	ug/L		07/11/19 17:18	07/19/19 00:52	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/11/19 17:18	07/19/19 00:52	1
4,6-Dinitro-ortho-cresol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
Di-n-octyl phthalate	ND		10	0.46	ug/L		07/11/19 17:18	07/19/19 00:52	1
1,4-Dioxane	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
Hexachlorobenzene	ND	*	10	0.26	ug/L		07/11/19 17:18	07/19/19 00:52	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/11/19 17:18	07/19/19 00:52	1
Hexachloroethane	ND		10	4.4	ug/L		07/11/19 17:18	07/19/19 00:52	1
Indene	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 00:52	1
Isophorone	ND		10	0.59	ug/L		07/11/19 17:18	07/19/19 00:52	1
2-Methylphenol	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 00:52	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/11/19 17:18	07/19/19 00:52	1

Client Sample ID: MW11-ROX-070919
Date Collected: 07/09/19 12:10
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.3	ug/L		07/11/19 17:18	07/19/19 00:52	1
3-Nitroaniline	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 00:52	1
4-Nitroaniline	ND	*	10	2.6	ug/L		07/11/19 17:18	07/19/19 00:52	1
Nitrobenzene	ND		10	0.57	ug/L		07/11/19 17:18	07/19/19 00:52	1
2-Nitrophenol	ND		10	0.68	ug/L		07/11/19 17:18	07/19/19 00:52	1
4-Nitrophenol	ND		10	2.2	ug/L		07/11/19 17:18	07/19/19 00:52	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 00:52	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/11/19 17:18	07/19/19 00:52	1
N-Nitrosodiphenylamine	ND	UJ	10	0.49	ug/L		07/11/19 17:18	07/19/19 00:52	1
Pentachlorophenol	ND		21	1.9	ug/L		07/11/19 17:18	07/19/19 00:52	1
Phenol	ND		10	2.7	ug/L		07/11/19 17:18	07/19/19 00:52	1
Pyridine	ND		10	3.3	ug/L		07/11/19 17:18	07/19/19 00:52	1
Quinoline	ND		10	6.2	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,4,5-Trichlorophenol	ND		10	3.9	ug/L		07/11/19 17:18	07/19/19 00:52	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*34 - 120*	*07/11/19 17:18*	*07/19/19 00:52*	*1*
2-Fluorophenol	*54*		*10 - 120*	*07/11/19 17:18*	*07/19/19 00:52*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*07/11/19 17:18*	*07/19/19 00:52*	*1*
Phenol-d5	*66*		*10 - 120*	*07/11/19 17:18*	*07/19/19 00:52*	*1*
Terphenyl-d14	*71*		*53 - 125*	*07/11/19 17:18*	*07/19/19 00:52*	*1*
2,4,6-Tribromophenol	*63*		*15 - 135*	*07/11/19 17:18*	*07/19/19 00:52*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.028	0.0052	ug/L		07/16/19 12:15	07/17/19 01:52	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		07/16/19 12:15	07/17/19 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*07/16/19 12:15*	*07/17/19 01:52*	*1*

Client Sample ID: MW27-ROX-070919
Date Collected: 07/09/19 12:55
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-14
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			07/18/19 17:05	1
Acrolein	ND		20	10	ug/L			07/18/19 17:05	1
Acrylonitrile	ND	*	10	2.8	ug/L			07/18/19 17:05	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 17:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 17:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 17:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 17:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 17:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 17:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 17:05	1
2-Chloroethyl vinyl ether	ND	*	5.0	2.0	ug/L			07/18/19 17:05	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 17:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 17:05	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 17:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 17:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 17:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 17:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 17:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
1,2-Dichloroethane	ND	*	1.0	0.50	ug/L			07/18/19 17:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 17:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 17:05	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 17:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 17:05	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 17:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 17:05	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 17:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 17:05	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 17:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 17:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 17:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 17:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 17:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 17:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 17:05	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 17:05	1

Client Sample ID: MW27-ROX-070919
Date Collected: 07/09/19 12:55
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-14
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			07/18/19 17:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 17:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 17:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 17:05	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 17:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 17:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 17:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 17:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 17:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 17:05	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 17:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 17:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 17:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 17:05	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 17:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 17:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*	*X*	*78 - 118*		*07/18/19 17:05*	*1*
Dibromofluoromethane	*112*		*81 - 121*		*07/18/19 17:05*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/18/19 17:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/19 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*78 - 118*		*07/22/19 17:37*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*07/22/19 17:37*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/22/19 17:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
Acenaphthylene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
Anthracene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzo[a]anthracene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzo[a]pyrene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzo[b]fluoranthene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzo[g,h,i]perylene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Benzo[k]fluoranthene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Chrysene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Dibenz(a,h)anthracene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1
Fluoranthene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
Fluorene	ND		0.21	0.022	ug/L		07/11/19 17:18	07/18/19 23:48	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.041	ug/L		07/11/19 17:18	07/18/19 23:48	1

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

Job ID: 400-172846-1

Client Sample ID: MW27-ROX-070919
Date Collected: 07/09/19 12:55
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-14
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		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
Pyrene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1
2-Methylnaphthalene	ND		0.21	0.021	ug/L		07/11/19 17:18	07/18/19 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*33 - 138*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
2-Fluorobiphenyl	*80*		*15 - 122*	*07/11/19 17:18*	*07/18/19 23:48*	*1*
Nitrobenzene-d5	*72*		*19 - 130*	*07/11/19 17:18*	*07/18/19 23:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/11/19 17:18	07/19/19 01:13	1
Benzenethiol	ND	* UJ	10	1.8	ug/L		07/11/19 17:18	07/19/19 01:13	1
Benzoic acid	ND		31	7.6	ug/L		07/11/19 17:18	07/19/19 01:13	1
Benzyl alcohol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 01:13	1
Bis(2-chloroethoxy)methane	ND		10	0.71	ug/L		07/11/19 17:18	07/19/19 01:13	1
Bis(2-chloroethyl)ether	ND		10	0.77	ug/L		07/11/19 17:18	07/19/19 01:13	1
bis (2-chloroisopropyl) ether	ND		10	0.84	ug/L		07/11/19 17:18	07/19/19 01:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/11/19 17:18	07/19/19 01:13	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		07/11/19 17:18	07/19/19 01:13	1
Butyl benzyl phthalate	ND		10	0.71	ug/L		07/11/19 17:18	07/19/19 01:13	1
4-Chloroaniline	ND		10	3.5	ug/L		07/11/19 17:18	07/19/19 01:13	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/11/19 17:18	07/19/19 01:13	1
2-Chloronaphthalene	ND		10	0.54	ug/L		07/11/19 17:18	07/19/19 01:13	1
2-Chlorophenol	ND		10	2.3	ug/L		07/11/19 17:18	07/19/19 01:13	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 01:13	1
Dibenz[a,h]acridine	ND	UJ	10	3.1	ug/L		07/11/19 17:18	07/19/19 01:13	1
Dibenzofuran	ND		10	0.54	ug/L		07/11/19 17:18	07/19/19 01:13	1
3,3'-Dichlorobenzidine	ND	*	10	2.7	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/11/19 17:18	07/19/19 01:13	1
Diethyl phthalate	ND		10	0.72	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 01:13	1
Dimethyl phthalate	ND		10	0.62	ug/L		07/11/19 17:18	07/19/19 01:13	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/11/19 17:18	07/19/19 01:13	1
4,6-Dinitro-ortho-cresol	ND		10	2.1	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/11/19 17:18	07/19/19 01:13	1
Di-n-octyl phthalate	ND		10	0.46	ug/L		07/11/19 17:18	07/19/19 01:13	1
1,4-Dioxane	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 01:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 01:13	1
Hexachlorobenzene	ND	*	10	0.26	ug/L		07/11/19 17:18	07/19/19 01:13	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/11/19 17:18	07/19/19 01:13	1
Hexachloroethane	ND		10	4.3	ug/L		07/11/19 17:18	07/19/19 01:13	1
Indene	ND		10	1.0	ug/L		07/11/19 17:18	07/19/19 01:13	1
Isophorone	ND		10	0.59	ug/L		07/11/19 17:18	07/19/19 01:13	1
2-Methylphenol	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 01:13	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/11/19 17:18	07/19/19 01:13	1

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

Job ID: 400-172846-1

Client Sample ID: MW27-ROX-070919
Date Collected: 07/09/19 12:55
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.3	ug/L		07/11/19 17:18	07/19/19 01:13	1
3-Nitroaniline	ND		10	1.9	ug/L		07/11/19 17:18	07/19/19 01:13	1
4-Nitroaniline	ND	*	10	2.6	ug/L		07/11/19 17:18	07/19/19 01:13	1
Nitrobenzene	ND		10	0.57	ug/L		07/11/19 17:18	07/19/19 01:13	1
2-Nitrophenol	ND		10	0.67	ug/L		07/11/19 17:18	07/19/19 01:13	1
4-Nitrophenol	ND		10	2.2	ug/L		07/11/19 17:18	07/19/19 01:13	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 01:13	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/11/19 17:18	07/19/19 01:13	1
N-Nitrosodiphenylamine	ND	us	10	0.49	ug/L		07/11/19 17:18	07/19/19 01:13	1
Pentachlorophenol	ND		21	1.9	ug/L		07/11/19 17:18	07/19/19 01:13	1
Phenol	ND		10	2.7	ug/L		07/11/19 17:18	07/19/19 01:13	1
Pyridine	ND		10	3.3	ug/L		07/11/19 17:18	07/19/19 01:13	1
Quinoline	ND		10	6.2	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/11/19 17:18	07/19/19 01:13	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/11/19 17:18	07/19/19 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*07/11/19 17:18*	*07/19/19 01:13*	*1*
2-Fluorophenol	*2*	*X*	*10 - 120*	*07/11/19 17:18*	*07/19/19 01:13*	*1*
Nitrobenzene-d5	*78*		*27 - 120*	*07/11/19 17:18*	*07/19/19 01:13*	*1*
Phenol-d5	*21*		*10 - 120*	*07/11/19 17:18*	*07/19/19 01:13*	*1*
Terphenyl-d14	*81*		*53 - 125*	*07/11/19 17:18*	*07/19/19 01:13*	*1*
2,4,6-Tribromophenol	*17*		*15 - 135*	*07/11/19 17:18*	*07/19/19 01:13*	*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	0.0055	ug/L		07/17/19 13:20	07/17/19 16:57	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/17/19 13:20	07/17/19 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/17/19 13:20*	*07/17/19 16:57*	*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.
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/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
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.
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: 400-172846-1

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)
400-172846-1	TB-ROX-070919-8260-B	113	109	105
400-172846-1 - RA	TB-ROX-070919-8260-B	118	105	107
400-172846-3	P114R-ROX-070919-EB	115	110	103
400-172846-3 - RA	P114R-ROX-070919-EB	117	102	104
400-172846-4	P114R-ROX-070919	113	107	101
400-172846-4 - RA	P114R-ROX-070919	118	103	104
400-172846-5	MW13-ROX-070919	118	109	105
400-172846-5 - RA	MW13-ROX-070919	111	102	107
400-172846-6	MW16-ROX-070919	118	112	102
400-172846-6 - RA	MW16-ROX-070919	118	104	106
400-172846-6 MS	MW16-ROX-070919	112	111	104
400-172846-6 MS - RA	MW16-ROX-070919	118	101	106
400-172846-6 MSD	MW16-ROX-070919	114	111	103
400-172846-6 MSD - RA	MW16-ROX-070919	117	101	105
400-172846-7	MW2-ROX-070919	113	110	102
400-172846-8	TB-ROX-070919-8260-A	113	114	104
400-172846-8 - RA	TB-ROX-070919-8260-A	115	102	110
400-172846-10	P54-ROX-070919-EB	114	113	102
400-172846-10 - RA	P54-ROX-070919-EB	111	102	105
400-172846-11	P54-ROX-070919	119 X	114	102
400-172846-11 - RA	P54-ROX-070919	118	102	105
400-172846-12	MW24-ROX-070919	115	110	100
400-172846-12 - RA	MW24-ROX-070919	112	103	108
400-172846-13	MW11-ROX-070919	115	112	103
400-172846-13 - RA	MW11-ROX-070919	114	105	109
400-172846-14	MW27-ROX-070919	121 X	112	103
400-172846-14 - RA	MW27-ROX-070919	117	103	106
LCS 400-448479/1002	Lab Control Sample	113	115	101
LCS 400-448658/1002	Lab Control Sample	111	103	106
LCS 400-448961/1002	Lab Control Sample	115	105	107
MB 400-448479/4	Method Blank	113	113	103
MB 400-448658/4	Method Blank	115	103	104
MB 400-448961/4	Method Blank	115	106	106

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)
400-172846-3	P114R-ROX-070919-EB	75	66	93	81	93	84
400-172846-4	P114R-ROX-070919	55	49	78	66	53	96
400-172846-5	MW13-ROX-070919	67	62	84	73	65	95
400-172846-6	MW16-ROX-070919	75	39	58	47	94	84
400-172846-6 MS	MW16-ROX-070919	55	31	40	39	63	64

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)
400-172846-6 MSD	MW16-ROX-070919	79	33	56	48	82	88
400-172846-7	MW2-ROX-070919	70	24	81	63	79	108
400-172846-10	P54-ROX-070919-EB	66	53	84	70	84	75
400-172846-11	P54-ROX-070919	64	41	78	60	76	61
400-172846-12	MW24-ROX-070919	68	50	86	59	85	59
400-172846-13	MW11-ROX-070919	59	54	73	66	71	63
400-172846-14	MW27-ROX-070919	66	2 X	78	21	81	17
LCS 400-447641/2-A	Lab Control Sample	74	43	60	57	104	126
LCS 400-447641/4-A	Lab Control Sample	70	35	58	44	96	77
LCSD 400-447641/5-A	Lab Control Sample Dup	68	25	58	41	98	67
MB 400-447641/1-A	Method Blank	76	43	62	55	105	85

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)
400-172846-3	P114R-ROX-070919-EB	135	85	76
400-172846-4	P114R-ROX-070919	63	69	67
400-172846-5	MW13-ROX-070919	75	76	72
400-172846-6	MW16-ROX-070919	116	98	88
400-172846-6 MS	MW16-ROX-070919	60	59	48
400-172846-6 MSD	MW16-ROX-070919	80	79	55
400-172846-7	MW2-ROX-070919	107	81	66
400-172846-10	P54-ROX-070919-EB	117	80	74
400-172846-11	P54-ROX-070919	97	77	67
400-172846-12	MW24-ROX-070919	121	83	74
400-172846-13	MW11-ROX-070919	107	75	67
400-172846-14	MW27-ROX-070919	104	80	72
MB 400-447641/1-A	Method Blank	0 X	0 X	NaN

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)
400-172846-2	TB-ROX-070919-8011-B	106

Surrogate Summary

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

Job ID: 400-172846-1

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)
400-172846-3	P114R-ROX-070919-EB	98
400-172846-4	P114R-ROX-070919	101
400-172846-5	MW13-ROX-070919	134
400-172846-6	MW16-ROX-070919	118
400-172846-6 MS	MW16-ROX-070919	108
400-172846-6 MSD	MW16-ROX-070919	102
400-172846-7	MW2-ROX-070919	116
400-172846-9	TB-ROX-070919-8011-A	111
400-172846-10	P54-ROX-070919-EB	113
400-172846-11	P54-ROX-070919	112
400-172846-12	MW24-ROX-070919	111
400-172846-13	MW11-ROX-070919	108
400-172846-14	MW27-ROX-070919	99
LCS 400-448201/2-A	Lab Control Sample	102
LCS 400-448410/2-A	Lab Control Sample	106
MB 400-448201/1-A	Method Blank	115
MB 400-448410/1-A	Method Blank	113

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-172846-1

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: 400-172846-1

Client Sample ID: TB-ROX-070919-8260-B

Lab Sample ID: 400-172846-1
Matrix: Water

Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 10:28	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 09:39	WPD	TAL PEN

Client Sample ID: TB-ROX-070919-8011-B

Lab Sample ID: 400-172846-2
Matrix: Water

Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 20:36	DS	TAL PEN

Client Sample ID: P114R-ROX-070919-EB

Lab Sample ID: 400-172846-3
Matrix: Water

Date Collected: 07/09/19 08:45
Date Received: 07/10/19 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 14:10	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 17:01	WPD	TAL PEN
Total/NA	Prep	3520C			1037.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 23:06	VC1	TAL PEN
Total/NA	Prep	3520C			1037.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448700	07/19/19 14:58	S1S	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 21:21	DS	TAL PEN

Client Sample ID: P114R-ROX-070919

Lab Sample ID: 400-172846-4
Matrix: Water

Date Collected: 07/09/19 09:35
Date Received: 07/10/19 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 14:34	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 17:27	WPD	TAL PEN
Total/NA	Prep	3520C			1040.6 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		5			448576	07/18/19 22:24	VC1	TAL PEN
Total/NA	Prep	3520C			1040.6 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			448527	07/18/19 23:15	KJA	TAL PEN
Total/NA	Prep	8011			37.2 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 21:44	DS	TAL PEN

Client Sample ID: MW13-ROX-070919

Lab Sample ID: 400-172846-5
Matrix: Water

Date Collected: 07/09/19 10:20
Date Received: 07/10/19 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 14:59	WPD	TAL PEN

Client Sample ID: MW13-ROX-070919

Lab Sample ID: 400-172846-5

Date Collected: 07/09/19 10:20
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 17:53	WPD	TAL PEN
Total/NA	Prep	3520C			1049.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 22:45	VC1	TAL PEN
Total/NA	Prep	3520C			1049.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448527	07/18/19 23:31	KJA	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 22:07	DS	TAL PEN

Client Sample ID: MW16-ROX-070919

Lab Sample ID: 400-172846-6

Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 09:38	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 10:04	WPD	TAL PEN
Total/NA	Prep	3520C			1045 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	448422	07/18/19 01:23	VC1	TAL PEN
Total/NA	Prep	3520C			1045 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448495	07/18/19 10:50	S1S	TAL PEN
Total/NA	Prep	8011			37 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 22:30	DS	TAL PEN

Client Sample ID: MW2-ROX-070919

Lab Sample ID: 400-172846-7

Date Collected: 07/09/19 12:45
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	448479	07/18/19 10:52	WPD	TAL PEN
Total/NA	Prep	3520C			1048 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 23:27	VC1	TAL PEN
Total/NA	Prep	3520C			1048 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448527	07/19/19 07:18	KJA	TAL PEN
Total/NA	Prep	8011			33.6 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 23:37	DS	TAL PEN

Client Sample ID: TB-ROX-070919-8260-A

Lab Sample ID: 400-172846-8

Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 12:32	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 14:33	WPD	TAL PEN

Client Sample ID: TB-ROX-070919-8011-A

Lab Sample ID: 400-172846-9

Date Collected: 07/09/19 00:00
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.8 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/17/19 00:00	DS	TAL PEN

Client Sample ID: P54-ROX-070919-EB

Lab Sample ID: 400-172846-10

Date Collected: 07/09/19 09:45
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 15:25	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 18:19	WPD	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/18/19 23:48	VC1	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448527	07/19/19 07:34	KJA	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/17/19 00:22	DS	TAL PEN

Client Sample ID: P54-ROX-070919

Lab Sample ID: 400-172846-11

Date Collected: 07/09/19 10:25
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 15:51	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 18:45	WPD	TAL PEN
Total/NA	Prep	3520C			989.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/19/19 00:09	VC1	TAL PEN
Total/NA	Prep	3520C			989.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448502	07/18/19 21:25	KJA	TAL PEN
Total/NA	Prep	8011			36.1 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/17/19 00:45	DS	TAL PEN

Client Sample ID: MW24-ROX-070919

Lab Sample ID: 400-172846-12

Date Collected: 07/09/19 11:15
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 16:15	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448961	07/22/19 16:45	RS	TAL PEN
Total/NA	Prep	3520C			972.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/19/19 00:30	VC1	TAL PEN
Total/NA	Prep	3520C			972.8 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448502	07/18/19 21:40	KJA	TAL PEN
Total/NA	Prep	8011			36.5 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/17/19 01:30	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-172846-1

Client Sample ID: MW11-ROX-070919

Lab Sample ID: 400-172846-13

Date Collected: 07/09/19 12:10
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 16:41	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448961	07/22/19 17:11	RS	TAL PEN
Total/NA	Prep	3520C			960.6 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/19/19 00:52	VC1	TAL PEN
Total/NA	Prep	3520C			960.6 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448700	07/19/19 14:42	S1S	TAL PEN
Total/NA	Prep	8011			37.1 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/17/19 01:52	DS	TAL PEN

Client Sample ID: MW27-ROX-070919

Lab Sample ID: 400-172846-14

Date Collected: 07/09/19 12:55
Date Received: 07/10/19 08:59

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 17:05	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448961	07/22/19 17:37	RS	TAL PEN
Total/NA	Prep	3520C			966 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448576	07/19/19 01:13	VC1	TAL PEN
Total/NA	Prep	3520C			966 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448527	07/18/19 23:48	KJA	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 16:57	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-447641/1-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	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448422	07/18/19 00:08	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			448495	07/18/19 09:53	S1S	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448201/1-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	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 17:11	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-172846-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448410/1-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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 16:11	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448479/4
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	448479	07/18/19 07:59	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448658/4
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	448658	07/19/19 09:15	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448961/4
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	448961	07/22/19 14:09	RS	TAL PEN

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

Lab Sample ID: LCS 400-447641/2-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	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448987	07/22/19 16:22	VC1	TAL PEN

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

Lab Sample ID: LCS 400-447641/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448422	07/18/19 00:33	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448201/2-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	6011			35 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	6011		1			448291	07/16/19 17:33	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448410/2-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	6011			35 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	6011		1			448449	07/17/19 16:34	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448479/1002**
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	448479	07/18/19 07:11	WPD	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448658/1002**
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	448658	07/19/19 08:27	WPD	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448961/1002**
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	448961	07/22/19 13:08	RS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-447641/5-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	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448422	07/18/19 00:58	VC1	TAL PEN

Client Sample ID: MW16-ROX-070919 — **Lab Sample ID: 400-172846-6 MS**
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 11:16	WPD	TAL PEN

Lab Chronicle

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

Job ID: 400-172846-1

Client Sample ID: MW16-ROX-070919
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-6 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 12:56	WPD	TAL PEN
Total/NA	Prep	3520C			1050.2 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448422	07/18/19 01:48	VC1	TAL PEN
Total/NA	Prep	3520C			1050.2 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			448495	07/18/19 10:16	S1S	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 22:52	DS	TAL PEN

Client Sample ID: MW16-ROX-070919
Date Collected: 07/09/19 11:45
Date Received: 07/10/19 08:59

Lab Sample ID: 400-172846-6 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448479	07/18/19 11:42	WPD	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	448658	07/19/19 13:20	WPD	TAL PEN
Total/NA	Prep	3520C			1055.2 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D		1			448422	07/18/19 02:13	VC1	TAL PEN
Total/NA	Prep	3520C			1055.2 mL	1 mL	447641	07/11/19 17:18	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			448495	07/18/19 10:33	S1S	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	448201	07/16/19 12:15	DS	TAL PEN
Total/NA	Analysis	8011		1			448291	07/16/19 23:15	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: 448479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-1	TB-ROX-070919-8260-B	Total/NA	Water	8260B	
400-172846-3	P114R-ROX-070919-EB	Total/NA	Water	8260B	
400-172846-4	P114R-ROX-070919	Total/NA	Water	8260B	
400-172846-5	MW13-ROX-070919	Total/NA	Water	8260B	
400-172846-6	MW16-ROX-070919	Total/NA	Water	8260B	
400-172846-7	MW2-ROX-070919	Total/NA	Water	8260B	
400-172846-8	TB-ROX-070919-8260-A	Total/NA	Water	8260B	
400-172846-10	P54-ROX-070919-EB	Total/NA	Water	8260B	
400-172846-11	P54-ROX-070919	Total/NA	Water	8260B	
400-172846-12	MW24-ROX-070919	Total/NA	Water	8260B	
400-172846-13	MW11-ROX-070919	Total/NA	Water	8260B	
400-172846-14	MW27-ROX-070919	Total/NA	Water	8260B	
MB 400-448479/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448479/1002	Lab Control Sample	Total/NA	Water	8260B	
400-172846-6 MS	MW16-ROX-070919	Total/NA	Water	8260B	
400-172846-6 MSD	MW16-ROX-070919	Total/NA	Water	8260B	

Analysis Batch: 448658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-1 - RA	TB-ROX-070919-8260-B	Total/NA	Water	8260B	
400-172846-3 - RA	P114R-ROX-070919-EB	Total/NA	Water	8260B	
400-172846-4 - RA	P114R-ROX-070919	Total/NA	Water	8260B	
400-172846-5 - RA	MW13-ROX-070919	Total/NA	Water	8260B	
400-172846-6 - RA	MW16-ROX-070919	Total/NA	Water	8260B	
400-172846-8 - RA	TB-ROX-070919-8260-A	Total/NA	Water	8260B	
400-172846-10 - RA	P54-ROX-070919-EB	Total/NA	Water	8260B	
400-172846-11 - RA	P54-ROX-070919	Total/NA	Water	8260B	
MB 400-448658/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448658/1002	Lab Control Sample	Total/NA	Water	8260B	
400-172846-6 MS - RA	MW16-ROX-070919	Total/NA	Water	8260B	
400-172846-6 MSD - RA	MW16-ROX-070919	Total/NA	Water	8260B	

Analysis Batch: 448961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-12 - RA	MW24-ROX-070919	Total/NA	Water	8260B	
400-172846-13 - RA	MW11-ROX-070919	Total/NA	Water	8260B	
400-172846-14 - RA	MW27-ROX-070919	Total/NA	Water	8260B	
MB 400-448961/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448961/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 447641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-3	P114R-ROX-070919-EB	Total/NA	Water	3520C	
400-172846-4	P114R-ROX-070919	Total/NA	Water	3520C	
400-172846-5	MW13-ROX-070919	Total/NA	Water	3520C	
400-172846-6	MW16-ROX-070919	Total/NA	Water	3520C	
400-172846-7	MW2-ROX-070919	Total/NA	Water	3520C	
400-172846-10	P54-ROX-070919-EB	Total/NA	Water	3520C	
400-172846-11	P54-ROX-070919	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 447641 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-12	MW24-ROX-070919	Total/NA	Water	3520C	
400-172846-13	MW11-ROX-070919	Total/NA	Water	3520C	
400-172846-14	MW27-ROX-070919	Total/NA	Water	3520C	
MB 400-447641/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-447641/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-447641/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-447641/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-172846-6 MS	MW16-ROX-070919	Total/NA	Water	3520C	
400-172846-6 MSD	MW16-ROX-070919	Total/NA	Water	3520C	

Analysis Batch: 448422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-6	MW16-ROX-070919	Total/NA	Water	8270D	447641
MB 400-447641/1-A	Method Blank	Total/NA	Water	8270D	447641
LCS 400-447641/4-A	Lab Control Sample	Total/NA	Water	8270D	447641
LCSD 400-447641/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	447641
400-172846-6 MS	MW16-ROX-070919	Total/NA	Water	8270D	447641
400-172846-6 MSD	MW16-ROX-070919	Total/NA	Water	8270D	447641

Analysis Batch: 448495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-6	MW16-ROX-070919	Total/NA	Water	8270D LL	447641
MB 400-447641/1-A	Method Blank	Total/NA	Water	8270D LL	447641
400-172846-6 MS	MW16-ROX-070919	Total/NA	Water	8270D LL	447641
400-172846-6 MSD	MW16-ROX-070919	Total/NA	Water	8270D LL	447641

Analysis Batch: 448502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-11	P54-ROX-070919	Total/NA	Water	8270D LL	447641
400-172846-12	MW24-ROX-070919	Total/NA	Water	8270D LL	447641

Analysis Batch: 448527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-4	P114R-ROX-070919	Total/NA	Water	8270D LL	447641
400-172846-5	MW13-ROX-070919	Total/NA	Water	8270D LL	447641
400-172846-7	MW2-ROX-070919	Total/NA	Water	8270D LL	447641
400-172846-10	P54-ROX-070919-EB	Total/NA	Water	8270D LL	447641
400-172846-14	MW27-ROX-070919	Total/NA	Water	8270D LL	447641

Analysis Batch: 448576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-3	P114R-ROX-070919-EB	Total/NA	Water	8270D	447641
400-172846-4	P114R-ROX-070919	Total/NA	Water	8270D	447641
400-172846-5	MW13-ROX-070919	Total/NA	Water	8270D	447641
400-172846-7	MW2-ROX-070919	Total/NA	Water	8270D	447641
400-172846-10	P54-ROX-070919-EB	Total/NA	Water	8270D	447641
400-172846-11	P54-ROX-070919	Total/NA	Water	8270D	447641
400-172846-12	MW24-ROX-070919	Total/NA	Water	8270D	447641
400-172846-13	MW11-ROX-070919	Total/NA	Water	8270D	447641
400-172846-14	MW27-ROX-070919	Total/NA	Water	8270D	447641

GC/MS Semi VOA

Analysis Batch: 448700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-3	P114R-ROX-070919-EB	Total/NA	Water	8270D LL	447641
400-172846-13	MW11-ROX-070919	Total/NA	Water	8270D LL	447641

Analysis Batch: 448987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-447641/2-A	Lab Control Sample	Total/NA	Water	8270D	447641

GC Semi VOA

Prep Batch: 448201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-2	TB-ROX-070919-8011-B	Total/NA	Water	8011	
400-172846-3	P114R-ROX-070919-EB	Total/NA	Water	8011	
400-172846-4	P114R-ROX-070919	Total/NA	Water	8011	
400-172846-5	MW13-ROX-070919	Total/NA	Water	8011	
400-172846-6	MW16-ROX-070919	Total/NA	Water	8011	
400-172846-7	MW2-ROX-070919	Total/NA	Water	8011	
400-172846-9	TB-ROX-070919-8011-A	Total/NA	Water	8011	
400-172846-10	P54-ROX-070919-EB	Total/NA	Water	8011	
400-172846-11	P54-ROX-070919	Total/NA	Water	8011	
400-172846-12	MW24-ROX-070919	Total/NA	Water	8011	
400-172846-13	MW11-ROX-070919	Total/NA	Water	8011	
MB 400-448201/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448201/2-A	Lab Control Sample	Total/NA	Water	8011	
400-172846-6 MS	MW16-ROX-070919	Total/NA	Water	8011	
400-172846-6 MSD	MW16-ROX-070919	Total/NA	Water	8011	

Analysis Batch: 448291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-2	TB-ROX-070919-8011-B	Total/NA	Water	8011	448201
400-172846-3	P114R-ROX-070919-EB	Total/NA	Water	8011	448201
400-172846-4	P114R-ROX-070919	Total/NA	Water	8011	448201
400-172846-5	MW13-ROX-070919	Total/NA	Water	8011	448201
400-172846-6	MW16-ROX-070919	Total/NA	Water	8011	448201
400-172846-7	MW2-ROX-070919	Total/NA	Water	8011	448201
400-172846-9	TB-ROX-070919-8011-A	Total/NA	Water	8011	448201
400-172846-10	P54-ROX-070919-EB	Total/NA	Water	8011	448201
400-172846-11	P54-ROX-070919	Total/NA	Water	8011	448201
400-172846-12	MW24-ROX-070919	Total/NA	Water	8011	448201
400-172846-13	MW11-ROX-070919	Total/NA	Water	8011	448201
MB 400-448201/1-A	Method Blank	Total/NA	Water	8011	448201
LCS 400-448201/2-A	Lab Control Sample	Total/NA	Water	8011	448201
400-172846-6 MS	MW16-ROX-070919	Total/NA	Water	8011	448201
400-172846-6 MSD	MW16-ROX-070919	Total/NA	Water	8011	448201

Prep Batch: 448410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-14	MW27-ROX-070919	Total/NA	Water	8011	
MB 400-448410/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448410/2-A	Lab Control Sample	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-172846-1

GC Semi VOA

Analysis Batch: 448449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172846-14	MW27-ROX-070919	Total/NA	Water	8011	448410
MB 400-448410/1-A	Method Blank	Total/NA	Water	8011	448410
LCS 400-448410/2-A	Lab Control Sample	Total/NA	Water	8011	448410

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

Lab Sample ID: MB 400-448479/4
Matrix: Water
Analysis Batch: 448479

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/18/19 07:59	1
Acrolein	ND		20	10	ug/L			07/18/19 07:59	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/19 07:59	1
Benzene	ND		1.0	0.38	ug/L			07/18/19 07:59	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/19 07:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/19 07:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Bromoform	ND		5.0	0.71	ug/L			07/18/19 07:59	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/19 07:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/19 07:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/19 07:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/19 07:59	1
Chloroform	ND		1.0	0.60	ug/L			07/18/19 07:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/19 07:59	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/19 07:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 07:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/19 07:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/19 07:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/19 07:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/19 07:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/19 07:59	1
2-Hexanone	ND		25	3.1	ug/L			07/18/19 07:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/19 07:59	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/19 07:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/19 07:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/19 07:59	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/19 07:59	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/19 07:59	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/19 07:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/19 07:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/19 07:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/19 07:59	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/19 07:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/19 07:59	1

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

Lab Sample ID: MB 400-448479/4
Matrix: Water
Analysis Batch: 448479

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/19 07:59	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/19 07:59	1
Styrene	ND		1.0	1.0	ug/L			07/18/19 07:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/19 07:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/19 07:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/19 07:59	1
Toluene	ND		1.0	0.41	ug/L			07/18/19 07:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/19 07:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/19 07:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/19 07:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/19 07:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/19 07:59	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/19 07:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/19 07:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/19 07:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/19 07:59	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/19 07:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/19 07:59	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/19 07:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/18/19 07:59*	*1*
Dibromofluoromethane	*113*		*81 - 121*		*07/18/19 07:59*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/18/19 07:59*	*1*

Lab Sample ID: LCS 400-448479/1002
Matrix: Water
Analysis Batch: 448479

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	243		ug/L		121	43 - 160
Acrolein	250	394		ug/L		158	38 - 160
Acrylonitrile	500	756	*	ug/L		151	64 - 142
Benzene	50.0	45.7		ug/L		91	70 - 130
Bromobenzene	50.0	46.6		ug/L		93	70 - 132
Bromochloromethane	50.0	54.1		ug/L		108	70 - 130
Bromodichloromethane	50.0	54.5		ug/L		109	67 - 133
Bromoform	50.0	54.5		ug/L		109	57 - 140
Bromomethane	25.0	39.8		ug/L		159	10 - 160
2-Butanone (MEK)	200	169		ug/L		84	61 - 145
Carbon disulfide	50.0	43.9		ug/L		88	61 - 137
Carbon tetrachloride	50.0	57.1		ug/L		114	61 - 137
Chlorobenzene	50.0	50.0		ug/L		100	70 - 130
Dibromochloromethane	50.0	55.8		ug/L		112	67 - 135
Chloroethane	25.0	31.9		ug/L		128	55 - 141

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

Lab Sample ID: LCS 400-448479/1002
Matrix: Water
Analysis Batch: 448479

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	89.2	*	ug/L		357	10 - 160
Chloroform	50.0	56.3		ug/L		113	69 - 130
1-Chlorohexane	50.0	65.0		ug/L		130	69 - 130
Chloromethane	25.0	27.9		ug/L		111	58 - 137
cis-1,2-Dichloroethene	50.0	62.7		ug/L		125	68 - 130
cis-1,3-Dichloropropene	50.0	52.2		ug/L		104	69 - 132
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	67 - 130
1,3-Dichlorobenzene	50.0	48.0		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	19.5		ug/L		78	41 - 146
1,1-Dichloroethane	50.0	62.1		ug/L		124	70 - 130
1,2-Dichloroethane	50.0	68.9	*	ug/L		138	69 - 130
1,1-Dichloroethene	50.0	50.4		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	55.5		ug/L		111	70 - 130
1,3-Dichloropropane	50.0	52.2		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	59.0		ug/L		118	52 - 135
1,1-Dichloropropene	50.0	52.8		ug/L		106	70 - 130
Ethylbenzene	50.0	49.8		ug/L		100	70 - 130
Ethyl methacrylate	50.0	49.8		ug/L		100	68 - 130
Hexachlorobutadiene	50.0	48.5		ug/L		97	53 - 140
2-Hexanone	200	249		ug/L		125	65 - 137
Isopropylbenzene	50.0	49.9		ug/L		100	70 - 130
Methylene bromide	50.0	50.1		ug/L		100	70 - 130
Methylene Chloride	50.0	49.3		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	269		ug/L		134	69 - 138
Methyl tert-butyl ether	50.0	55.7		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	50.9		ug/L		102	70 - 130
Naphthalene	50.0	51.5		ug/L		103	47 - 149
n-Butylbenzene	50.0	54.3		ug/L		109	67 - 130
N-Propylbenzene	50.0	54.4		ug/L		109	70 - 130
o-Chlorotoluene	50.0	56.0		ug/L		112	70 - 130
o-Xylene	50.0	51.4		ug/L		103	70 - 130
p-Chlorotoluene	50.0	57.0		ug/L		114	70 - 130
p-Isopropyltoluene	50.0	54.7		ug/L		109	65 - 130
sec-Butylbenzene	50.0	51.6		ug/L		103	66 - 130
Styrene	50.0	44.5		ug/L		89	70 - 130
tert-Butylbenzene	50.0	60.2		ug/L		120	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/L		103	70 - 131
Tetrachloroethene	50.0	47.4		ug/L		95	65 - 130
Toluene	50.0	45.9		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	55.6		ug/L		111	63 - 130
1,2,3-Trichlorobenzene	50.0	44.8		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	45.6		ug/L		91	60 - 140
1,1,1-Trichloroethane	50.0	58.2		ug/L		116	68 - 130
1,1,2-Trichloroethane	50.0	47.6		ug/L		95	70 - 130
Trichloroethene	50.0	46.8		ug/L		94	70 - 130
Trichlorofluoromethane	25.0	32.7		ug/L		131	65 - 138

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

Lab Sample ID: LCS 400-448479/1002
Matrix: Water
Analysis Batch: 448479

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	64.4		ug/L		129	70 - 130
1,2,4-Trimethylbenzene	50.0	54.8		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	50.0	56.3		ug/L		113	69 - 130
Vinyl acetate	50.0	53.7		ug/L		107	26 - 160
Vinyl chloride	25.0	27.5		ug/L		110	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*113*		*78 - 118*
Dibromofluoromethane	*115*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448479

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	104		ug/L		52	43 - 150
Acrolein	ND		250	307		ug/L		123	38 - 150
Acrylonitrile	ND	*	500	717		ug/L		143	62 - 149
Benzene	ND		50.0	45.3		ug/L		91	56 - 142
Bromobenzene	ND		50.0	45.8		ug/L		92	59 - 136
Bromochloromethane	ND		50.0	53.6		ug/L		107	64 - 140
Bromodichloromethane	ND		50.0	54.1		ug/L		108	59 - 143
Bromoform	ND		50.0	49.6		ug/L		99	50 - 140
Bromomethane	ND		25.0	32.8		ug/L		131	10 - 150
2-Butanone (MEK)	ND	F1	200	106	F1	ug/L		53	55 - 150
Carbon disulfide	ND		50.0	43.5		ug/L		87	48 - 150
Carbon tetrachloride	ND		50.0	57.8		ug/L		116	55 - 145
Chlorobenzene	ND		50.0	49.2		ug/L		98	64 - 130
Dibromochloromethane	ND		50.0	53.8		ug/L		108	56 - 143
Chloroethane	ND		25.0	27.1		ug/L		108	50 - 150
2-Chloroethyl vinyl ether	ND	*	25.0	15.6		ug/L		62	10 - 150
Chloroform	ND		50.0	56.9		ug/L		114	60 - 141
1-Chlorohexane	ND		50.0	62.6		ug/L		125	56 - 136
Chloromethane	ND		25.0	23.4		ug/L		94	49 - 148
cis-1,2-Dichloroethene	ND		50.0	59.6		ug/L		119	59 - 143
cis-1,3-Dichloropropene	ND		50.0	51.4		ug/L		103	57 - 140
1,2-Dichlorobenzene	ND		50.0	46.0		ug/L		92	52 - 137
1,3-Dichlorobenzene	ND		50.0	45.5		ug/L		91	54 - 135
1,4-Dichlorobenzene	ND		50.0	46.2		ug/L		92	53 - 135
Dichlorodifluoromethane	ND		25.0	15.8		ug/L		63	16 - 150
1,1-Dichloroethane	ND		50.0	59.8		ug/L		120	61 - 144
1,2-Dichloroethane	ND	*	50.0	68.8		ug/L		138	60 - 141
1,1-Dichloroethene	ND		50.0	49.3		ug/L		99	54 - 147
1,2-Dichloropropane	ND		50.0	54.5		ug/L		109	66 - 137
1,3-Dichloropropane	ND		50.0	51.3		ug/L		103	66 - 133
2,2-Dichloropropane	ND		50.0	57.2		ug/L		114	42 - 144

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

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448479

Client Sample ID: MW16-ROX-070919
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	52.6		ug/L		105	65 - 136
Ethylbenzene	ND		50.0	49.2		ug/L		98	58 - 131
Ethyl methacrylate	ND		50.0	47.7		ug/L		95	64 - 130
Hexachlorobutadiene	ND	F2	50.0	44.6		ug/L		89	31 - 149
2-Hexanone	ND		200	173		ug/L		87	65 - 140
Isopropylbenzene	ND		50.0	47.8		ug/L		96	56 - 133
Methylene bromide	ND		50.0	49.0		ug/L		98	63 - 138
4-Methyl-2-pentanone (MIBK)	ND		200	240		ug/L		120	63 - 146
Methyl tert-butyl ether	ND		50.0	52.8		ug/L		106	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.2		ug/L		98	57 - 130
Naphthalene	ND		50.0	50.7		ug/L		101	25 - 150
n-Butylbenzene	ND	F2	50.0	49.7		ug/L		99	41 - 142
N-Propylbenzene	ND		50.0	50.8		ug/L		102	51 - 138
o-Chlorotoluene	ND		50.0	53.2		ug/L		106	53 - 134
o-Xylene	ND		50.0	49.9		ug/L		100	61 - 130
p-Chlorotoluene	ND		50.0	54.0		ug/L		108	54 - 133
p-Isopropyltoluene	ND		50.0	50.1		ug/L		100	48 - 139
sec-Butylbenzene	ND		50.0	49.8		ug/L		100	50 - 138
Styrene	ND		50.0	43.7		ug/L		87	58 - 131
tert-Butylbenzene	ND		50.0	55.2		ug/L		110	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	49.5		ug/L		99	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	50.2		ug/L		100	66 - 135
Tetrachloroethene	ND		50.0	45.2		ug/L		90	52 - 133
Toluene	ND		50.0	45.1		ug/L		90	65 - 130
trans-1,2-Dichloroethene	ND		50.0	49.2		ug/L		98	61 - 143
trans-1,3-Dichloropropene	ND		50.0	56.1		ug/L		112	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	43.6		ug/L		87	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	43.2		ug/L		86	39 - 148
1,1,1-Trichloroethane	ND		50.0	57.4		ug/L		115	57 - 142
1,1,2-Trichloroethane	ND		50.0	47.4		ug/L		95	66 - 131
Trichloroethene	ND		50.0	46.4		ug/L		93	64 - 136
Trichlorofluoromethane	ND		25.0	26.6		ug/L		107	54 - 150
1,2,3-Trichloropropane	ND		50.0	63.4		ug/L		127	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	51.7		ug/L		103	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	53.8		ug/L		108	52 - 135
Vinyl acetate	ND		50.0	44.4		ug/L		89	26 - 150
Vinyl chloride	ND		25.0	22.9		ug/L		91	46 - 150
Xylenes, Total	ND		100	99.1		ug/L		99	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*78 - 118*
Dibromofluoromethane	*111*		*81 - 121*
Toluene-d8 (Surr)	*104*		*80 - 120*

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

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448479

Client Sample ID: MW16-ROX-070919
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	94.0		ug/L		47	43 - 150	10	30
Acrolein	ND		250	340		ug/L		136	38 - 150	10	31
Acrylonitrile	ND	*	500	655		ug/L		131	62 - 149	9	30
Benzene	ND		50.0	41.4		ug/L		83	56 - 142	9	30
Bromobenzene	ND		50.0	36.9		ug/L		74	59 - 136	22	30
Bromochloromethane	ND		50.0	52.3		ug/L		105	64 - 140	3	30
Bromodichloromethane	ND		50.0	48.2		ug/L		96	59 - 143	12	30
Bromoform	ND		50.0	45.8		ug/L		92	50 - 140	8	30
Bromomethane	ND		25.0	35.4		ug/L		142	10 - 150	8	50
2-Butanone (MEK)	ND	F1	200	95.7	F1	ug/L		48	55 - 150	10	30
Carbon disulfide	ND		50.0	40.0		ug/L		80	48 - 150	8	30
Carbon tetrachloride	ND		50.0	53.3		ug/L		107	55 - 145	8	30
Chlorobenzene	ND		50.0	41.4		ug/L		83	64 - 130	17	30
Dibromochloromethane	ND		50.0	49.2		ug/L		98	56 - 143	9	30
Chloroethane	ND		25.0	32.7		ug/L		131	50 - 150	19	30
2-Chloroethyl vinyl ether	ND	*	25.0	10.1		ug/L		40	10 - 150	43	50
Chloroform	ND		50.0	51.7		ug/L		103	60 - 141	10	30
1-Chlorohexane	ND		50.0	49.9		ug/L		100	56 - 136	23	30
Chloromethane	ND		25.0	26.6		ug/L		107	49 - 148	13	31
cis-1,2-Dichloroethene	ND		50.0	57.1		ug/L		114	59 - 143	4	30
cis-1,3-Dichloropropene	ND		50.0	45.8		ug/L		92	57 - 140	11	30
1,2-Dichlorobenzene	ND		50.0	36.3		ug/L		73	52 - 137	24	30
1,3-Dichlorobenzene	ND		50.0	34.4		ug/L		69	54 - 135	28	30
1,4-Dichlorobenzene	ND		50.0	34.1		ug/L		68	53 - 135	30	30
Dichlorodifluoromethane	ND		25.0	19.1		ug/L		77	16 - 150	19	31
1,1-Dichloroethane	ND		50.0	57.0		ug/L		114	61 - 144	5	30
1,2-Dichloroethane	ND	*	50.0	63.0		ug/L		126	60 - 141	9	30
1,1-Dichloroethene	ND		50.0	46.7		ug/L		93	54 - 147	5	30
1,2-Dichloropropane	ND		50.0	52.4		ug/L		105	66 - 137	4	30
1,3-Dichloropropane	ND		50.0	46.6		ug/L		93	66 - 133	9	30
2,2-Dichloropropane	ND		50.0	54.7		ug/L		109	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	49.6		ug/L		99	65 - 136	6	30
Ethylbenzene	ND		50.0	39.6		ug/L		79	58 - 131	22	30
Ethyl methacrylate	ND		50.0	43.6		ug/L		87	64 - 130	9	30
Hexachlorobutadiene	ND	F2	50.0	30.2	F2	ug/L		60	31 - 149	38	36
2-Hexanone	ND		200	160		ug/L		80	65 - 140	8	30
Isopropylbenzene	ND		50.0	38.0		ug/L		76	56 - 133	23	30
Methylene bromide	ND		50.0	47.6		ug/L		95	63 - 138	3	30
4-Methyl-2-pentanone (MIBK)	ND		200	219		ug/L		109	63 - 146	10	30
Methyl tert-butyl ether	ND		50.0	52.1		ug/L		104	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	39.7		ug/L		79	57 - 130	21	30
Naphthalene	ND		50.0	44.6		ug/L		89	25 - 150	13	30
n-Butylbenzene	ND	F2	50.0	35.1	F2	ug/L		70	41 - 142	35	31
N-Propylbenzene	ND		50.0	39.3		ug/L		79	51 - 138	25	30
o-Chlorotoluene	ND		50.0	42.8		ug/L		86	53 - 134	22	30
o-Xylene	ND		50.0	41.2		ug/L		82	61 - 130	19	30
p-Chlorotoluene	ND		50.0	41.8		ug/L		84	54 - 133	25	30
p-Isopropyltoluene	ND		50.0	37.2		ug/L		74	48 - 139	29	30

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

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448479

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
sec-Butylbenzene	ND		50.0	37.8		ug/L		76	50 - 138	27	30
Styrene	ND		50.0	34.9		ug/L		70	58 - 131	23	30
tert-Butylbenzene	ND		50.0	44.5		ug/L		89	54 - 146	21	30
1,1,1,2-Tetrachloroethane	ND		50.0	44.5		ug/L		89	59 - 137	11	30
1,1,2,2-Tetrachloroethane	ND		50.0	46.3		ug/L		93	66 - 135	8	30
Tetrachloroethene	ND		50.0	38.7		ug/L		77	52 - 133	16	30
Toluene	ND		50.0	39.8		ug/L		80	65 - 130	12	30
trans-1,2-Dichloroethene	ND		50.0	45.8		ug/L		92	61 - 143	7	30
trans-1,3-Dichloropropene	ND		50.0	49.0		ug/L		98	53 - 133	13	30
1,2,3-Trichlorobenzene	ND		50.0	34.6		ug/L		69	43 - 145	23	30
1,2,4-Trichlorobenzene	ND		50.0	31.9		ug/L		64	39 - 148	30	30
1,1,1-Trichloroethane	ND		50.0	54.3		ug/L		109	57 - 142	5	30
1,1,2-Trichloroethane	ND		50.0	43.5		ug/L		87	66 - 131	8	30
Trichloroethene	ND		50.0	41.1		ug/L		82	64 - 136	12	30
Trichlorofluoromethane	ND		25.0	31.8		ug/L		127	54 - 150	18	30
1,2,3-Trichloropropane	ND		50.0	56.6		ug/L		113	65 - 133	11	30
1,2,4-Trimethylbenzene	ND		50.0	39.2		ug/L		78	50 - 139	27	30
1,3,5-Trimethylbenzene	ND		50.0	40.4		ug/L		81	52 - 135	28	30
Vinyl acetate	ND		50.0	52.7		ug/L		105	26 - 150	17	33
Vinyl chloride	ND		25.0	26.4		ug/L		106	46 - 150	14	30
Xylenes, Total	ND		100	81.0		ug/L		81	59 - 130	20	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*78 - 118*
Dibromofluoromethane	*111*		*81 - 121*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 400-448658/4
Matrix: Water
Analysis Batch: 448658

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 09:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/19/19 09:15*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*07/19/19 09:15*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/19/19 09:15*	*1*

Lab Sample ID: LCS 400-448658/1002
Matrix: Water
Analysis Batch: 448658

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	50.0	50.1		ug/L		100	66 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*78 - 118*

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

Lab Sample ID: LCS 400-448658/1002
Matrix: Water
Analysis Batch: 448658

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	103		81 - 121
Toluene-d8 (Surr)	106		80 - 120

Lab Sample ID: MB 400-448961/4
Matrix: Water
Analysis Batch: 448961

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/19 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	115		78 - 118		07/22/19 14:09	1
Dibromofluoromethane	106		81 - 121		07/22/19 14:09	1
Toluene-d8 (Surr)	106		80 - 120		07/22/19 14:09	1

Lab Sample ID: LCS 400-448961/1002
Matrix: Water
Analysis Batch: 448961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	50.0	52.9		ug/L		106	66 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	115		78 - 118
Dibromofluoromethane	105		81 - 121
Toluene-d8 (Surr)	107		80 - 120

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

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448658

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride - RA	ND		50.0	53.7		ug/L		107	60 - 146

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene - RA	118		78 - 118
Dibromofluoromethane - RA	101		81 - 121
Toluene-d8 (Surr) - RA	106		80 - 120

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448658

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride - RA	ND		50.0	50.2		ug/L		100	60 - 146	7	32

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

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448658

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene - RA	117		78 - 118
Dibromofluoromethane - RA	101		81 - 121
Toluene-d8 (Surr) - RA	105		80 - 120

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

Lab Sample ID: MB 400-447641/1-A
Matrix: Water
Analysis Batch: 448422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/11/19 17:18	07/18/19 00:08	1
Benzenethiol	ND		10	1.7	ug/L		07/11/19 17:18	07/18/19 00:08	1
Benzoic acid	ND		30	7.3	ug/L		07/11/19 17:18	07/18/19 00:08	1
Benzyl alcohol	ND		10	2.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/11/19 17:18	07/18/19 00:08	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/11/19 17:18	07/18/19 00:08	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/11/19 17:18	07/18/19 00:08	1
Bis(2-ethylhexyl) phthalate	94.6		10	5.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/11/19 17:18	07/18/19 00:08	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/11/19 17:18	07/18/19 00:08	1
4-Chloroaniline	ND		10	3.4	ug/L		07/11/19 17:18	07/18/19 00:08	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/11/19 17:18	07/18/19 00:08	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/11/19 17:18	07/18/19 00:08	1
2-Chlorophenol	ND		10	2.2	ug/L		07/11/19 17:18	07/18/19 00:08	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
Dibenzofuran	ND		10	0.52	ug/L		07/11/19 17:18	07/18/19 00:08	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
Diethyl phthalate	ND		10	0.70	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/11/19 17:18	07/18/19 00:08	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/11/19 17:18	07/18/19 00:08	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/11/19 17:18	07/18/19 00:08	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/11/19 17:18	07/18/19 00:08	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/11/19 17:18	07/18/19 00:08	1
1,4-Dioxane	ND		10	1.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/11/19 17:18	07/18/19 00:08	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/11/19 17:18	07/18/19 00:08	1
Hexachloroethane	ND		10	4.2	ug/L		07/11/19 17:18	07/18/19 00:08	1
Indene	ND		10	1.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
Isophorone	ND		10	0.57	ug/L		07/11/19 17:18	07/18/19 00:08	1
2-Methylphenol	ND		10	1.8	ug/L		07/11/19 17:18	07/18/19 00:08	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/11/19 17:18	07/18/19 00:08	1

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

Lab Sample ID: MB 400-447641/1-A
Matrix: Water
Analysis Batch: 448422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/11/19 17:18	07/18/19 00:08	1
3-Nitroaniline	ND		10	1.8	ug/L		07/11/19 17:18	07/18/19 00:08	1
4-Nitroaniline	ND		10	2.5	ug/L		07/11/19 17:18	07/18/19 00:08	1
Nitrobenzene	ND		10	0.55	ug/L		07/11/19 17:18	07/18/19 00:08	1
2-Nitrophenol	ND		10	0.65	ug/L		07/11/19 17:18	07/18/19 00:08	1
4-Nitrophenol	ND		10	2.1	ug/L		07/11/19 17:18	07/18/19 00:08	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/11/19 17:18	07/18/19 00:08	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/11/19 17:18	07/18/19 00:08	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/11/19 17:18	07/18/19 00:08	1
Pentachlorophenol	ND		20	1.8	ug/L		07/11/19 17:18	07/18/19 00:08	1
Phenol	ND		10	2.6	ug/L		07/11/19 17:18	07/18/19 00:08	1
Pyridine	ND		10	3.2	ug/L		07/11/19 17:18	07/18/19 00:08	1
Quinoline	ND		10	6.0	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/11/19 17:18	07/18/19 00:08	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/11/19 17:18	07/18/19 00:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*07/11/19 17:18*	*07/18/19 00:08*	*1*
2-Fluorophenol	*43*		*10 - 120*	*07/11/19 17:18*	*07/18/19 00:08*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*07/11/19 17:18*	*07/18/19 00:08*	*1*
Phenol-d5	*55*		*10 - 120*	*07/11/19 17:18*	*07/18/19 00:08*	*1*
Terphenyl-d14	*105*		*53 - 125*	*07/11/19 17:18*	*07/18/19 00:08*	*1*
2,4,6-Tribromophenol	*85*		*15 - 135*	*07/11/19 17:18*	*07/18/19 00:08*	*1*

Lab Sample ID: LCS 400-447641/2-A
Matrix: Water
Analysis Batch: 448987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	19.0		ug/L		63	29 - 120
Benzoic acid	117	17.0	J	ug/L		15	10 - 150
Benzyl alcohol	30.0	22.5		ug/L		75	19 - 125
Bis(2-chloroethoxy)methane	30.0	18.6		ug/L		62	45 - 120
Bis(2-chloroethyl)ether	30.0	16.9		ug/L		56	48 - 120
bis (2-chloroisopropyl) ether	30.0	15.3		ug/L		51	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	25.5		ug/L		85	48 - 150
4-Bromophenyl phenyl ether	30.0	36.1		ug/L		120	55 - 122
Butyl benzyl phthalate	30.0	23.4		ug/L		78	46 - 145
4-Chloroaniline	30.0	17.2		ug/L		57	30 - 120
4-Chloro-3-methylphenol	30.0	25.5		ug/L		85	39 - 140
2-Chloronaphthalene	30.0	24.3		ug/L		81	52 - 120
2-Chlorophenol	30.0	20.4		ug/L		68	34 - 120
4-Chlorophenyl phenyl ether	30.0	31.4		ug/L		105	58 - 124
Dibenz[a,h]acridine	30.0	27.3		ug/L		91	46 - 149
Dibenzofuran	30.0	27.3		ug/L		91	58 - 123
3,3'-Dichlorobenzidine	40.0	83.2	*	ug/L		208	39 - 135
2,4-Dichlorophenol	30.0	25.6		ug/L		85	39 - 128
Diethyl phthalate	30.0	31.2		ug/L		104	44 - 146

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

Lab Sample ID: LCS 400-447641/2-A
Matrix: Water
Analysis Batch: 448987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	30.0	21.5		ug/L		72	44 - 120
Dimethyl phthalate	30.0	29.6		ug/L		99	50 - 131
Di-n-butyl phthalate	30.0	30.4		ug/L		101	55 - 131
4,6-Dinitro-ortho-cresol	60.0	65.1		ug/L		109	10 - 150
2,4-Dinitrophenol	60.0	64.5		ug/L		108	10 - 150
2,4-Dinitrotoluene	30.0	31.8		ug/L		106	58 - 140
2,6-Dinitrotoluene	30.0	32.6		ug/L		109	57 - 130
Di-n-octyl phthalate	30.0	28.1		ug/L		94	50 - 150
1,4-Dioxane	30.0	12.2		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	24.5		ug/L		82	47 - 123
Hexachlorobenzene	30.0	40.2	*	ug/L		134	52 - 131
Hexachlorocyclopentadiene	30.0	8.79	J	ug/L		29	10 - 129
Hexachloroethane	30.0	15.4		ug/L		51	41 - 120
Indene	30.0	17.2		ug/L		57	47 - 120
Isophorone	30.0	18.4		ug/L		61	49 - 120
2-Methylphenol	30.0	20.3		ug/L		68	39 - 123
3 & 4 Methylphenol	30.0	21.0		ug/L		70	38 - 121
2-Nitroaniline	30.0	25.1		ug/L		84	47 - 150
3-Nitroaniline	30.0	33.6		ug/L		112	34 - 132
4-Nitroaniline	30.0	44.6	*	ug/L		149	41 - 135
Nitrobenzene	30.0	18.3		ug/L		61	47 - 120
2-Nitrophenol	30.0	20.2		ug/L		67	28 - 136
4-Nitrophenol	60.0	56.5		ug/L		94	10 - 150
N-Nitrosodimethylamine	30.0	21.6		ug/L		72	22 - 148
N-Nitrosodi-n-propylamine	30.0	20.0		ug/L		67	44 - 120
N-Nitrosodiphenylamine	29.8	30.7		ug/L		103	56 - 120
Pentachlorophenol	60.0	73.4		ug/L		122	15 - 141
Phenol	30.0	17.1		ug/L		57	33 - 120
Pyridine	60.0	29.0		ug/L		48	26 - 120
Quinoline	30.0	22.0		ug/L		73	51 - 129
2,4,5-Trichlorophenol	30.0	32.9		ug/L		110	38 - 147
2,4,6-Trichlorophenol	30.0	31.6		ug/L		105	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*60*		*27 - 120*
Phenol-d5	*57*		*10 - 120*
Terphenyl-d14	*104*		*53 - 125*
2,4,6-Tribromophenol	*126*		*15 - 135*

Lab Sample ID: LCS 400-447641/4-A
Matrix: Water
Analysis Batch: 448422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120

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

Lab Sample ID: LCS 400-447641/4-A
Matrix: Water
Analysis Batch: 448422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 447641

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	70		34 - 120
2-Fluorophenol	35		10 - 120
Nitrobenzene-d5	58		27 - 120
Phenol-d5	44		10 - 120
Terphenyl-d14	96		53 - 125
2,4,6-Tribromophenol	77		15 - 135

Lab Sample ID: LCSD 400-447641/5-A
Matrix: Water
Analysis Batch: 448422

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120	15	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	68		34 - 120
2-Fluorophenol	25		10 - 120
Nitrobenzene-d5	58		27 - 120
Phenol-d5	41		10 - 120
Terphenyl-d14	98		53 - 125
2,4,6-Tribromophenol	67		15 - 135

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448422

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		28.6	15.8		ug/L		55	10 - 143
Benzoic acid	ND		111	41.9		ug/L		38	10 - 134
Benzyl alcohol	ND		28.6	ND	F1	ug/L		0	10 - 154
Bis(2-chloroethoxy)methane	ND		28.6	11.8		ug/L		41	14 - 147
Bis(2-chloroethyl)ether	ND		28.6	11.5		ug/L		40	28 - 130
bis (2-chloroisopropyl) ether	ND		28.6	16.8		ug/L		59	10 - 141
Bis(2-ethylhexyl) phthalate	ND		28.6	22.7		ug/L		79	43 - 160
4-Bromophenyl phenyl ether	ND		28.6	20.8		ug/L		73	26 - 159
Butyl benzyl phthalate	ND		28.6	18.9		ug/L		66	43 - 151
4-Chloroaniline	ND		28.6	9.76		ug/L		34	10 - 152
4-Chloro-3-methylphenol	ND		28.6	15.5		ug/L		54	17 - 156
2-Chloronaphthalene	ND		28.6	20.3		ug/L		71	10 - 155
2-Chlorophenol	ND		28.6	15.2		ug/L		53	19 - 130
4-Chlorophenyl phenyl ether	ND		28.6	21.4		ug/L		75	25 - 161
Dibenz[a,h]acridine	ND		28.6	15.3		ug/L		54	42 - 147
Dibenzofuran	ND		28.6	20.6		ug/L		72	18 - 157
3,3'-Dichlorobenzidine	ND	*	38.1	19.0		ug/L		50	10 - 172
2,4-Dichlorophenol	ND		28.6	17.6		ug/L		61	16 - 147
Diethyl phthalate	ND		28.6	23.2		ug/L		81	23 - 160
2,4-Dimethylphenol	ND		28.6	19.7		ug/L		69	25 - 146
Dimethyl phthalate	ND		28.6	20.5		ug/L		72	11 - 158

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

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448422

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-butyl phthalate	ND		28.6	21.7		ug/L		76	28 - 162
4,6-Dinitro-ortho-cresol	ND		57.1	40.6		ug/L		71	10 - 168
2,4-Dinitrophenol	ND		57.1	42.0		ug/L		73	10 - 166
2,4-Dinitrotoluene	ND		28.6	20.0		ug/L		70	26 - 158
2,6-Dinitrotoluene	ND		28.6	19.8		ug/L		69	19 - 157
Di-n-octyl phthalate	ND		28.6	20.0		ug/L		70	42 - 150
1,4-Dioxane	ND		28.6	8.01	J	ug/L		28	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.6	18.5		ug/L		65	19 - 162
Hexachlorobenzene	ND	*	28.6	22.7		ug/L		79	45 - 145
Hexachlorocyclopentadiene	ND		28.6	8.68	J	ug/L		30	10 - 151
Hexachloroethane	ND		28.6	13.9		ug/L		48	29 - 130
Indene	ND		28.6	14.4		ug/L		51	22 - 130
Isophorone	ND		28.6	14.2		ug/L		50	24 - 144
2-Methylphenol	ND		28.6	21.6		ug/L		76	22 - 130
3 & 4 Methylphenol	ND		28.6	25.8		ug/L		90	31 - 130
2-Nitroaniline	ND		28.6	17.8		ug/L		62	10 - 162
3-Nitroaniline	ND		28.6	30.9		ug/L		108	10 - 163
4-Nitroaniline	ND	*	28.6	19.8		ug/L		69	10 - 162
Nitrobenzene	ND		28.6	18.7		ug/L		65	34 - 135
2-Nitrophenol	ND		28.6	13.7		ug/L		48	27 - 134
4-Nitrophenol	ND		57.1	48.2		ug/L		84	10 - 175
N-Nitrosodimethylamine	ND		28.6	34.4		ug/L		120	10 - 139
N-Nitrosodi-n-propylamine	ND		28.6	18.6		ug/L		65	13 - 147
N-Nitrosodiphenylamine	ND		28.3	20.5		ug/L		72	31 - 150
Pentachlorophenol	ND		57.1	40.2		ug/L		70	10 - 180
Phenol	ND		28.6	14.6		ug/L		51	23 - 130
Pyridine	ND		57.1	22.6		ug/L		40	10 - 130
Quinoline	ND		28.6	16.0		ug/L		56	10 - 180
2,4,5-Trichlorophenol	ND		28.6	22.6		ug/L		79	43 - 137
2,4,6-Trichlorophenol	ND		28.6	18.0		ug/L		63	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*31*		*10 - 120*
Nitrobenzene-d5	*40*		*27 - 120*
Phenol-d5	*39*		*10 - 120*
Terphenyl-d14	*63*		*53 - 125*
2,4,6-Tribromophenol	*64*		*15 - 135*

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448422

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		28.4	18.4		ug/L		65	10 - 143	15	63
Benzoic acid	ND		110	54.7		ug/L		50	10 - 134	26	49
Benzyl alcohol	ND		28.4	1.92	J F1	ug/L		7	10 - 154	NC	37
Bis(2-chloroethoxy)methane	ND		28.4	14.7		ug/L		52	14 - 147	22	70

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

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448422

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	ND		28.4	15.0		ug/L		53	28 - 130	26	42
bis (2-chloroisopropyl) ether	ND		28.4	19.5		ug/L		69	10 - 141	15	41
Bis(2-ethylhexyl) phthalate	ND		28.4	25.4		ug/L		89	43 - 160	11	35
4-Bromophenyl phenyl ether	ND		28.4	25.2		ug/L		89	26 - 159	19	30
Butyl benzyl phthalate	ND		28.4	22.0		ug/L		77	43 - 151	15	32
4-Chloroaniline	ND		28.4	13.6		ug/L		48	10 - 152	33	94
4-Chloro-3-methylphenol	ND		28.4	18.9		ug/L		66	17 - 156	19	40
2-Chloronaphthalene	ND		28.4	25.1		ug/L		88	10 - 155	21	29
2-Chlorophenol	ND		28.4	15.9		ug/L		56	19 - 130	5	42
4-Chlorophenyl phenyl ether	ND		28.4	27.1		ug/L		95	25 - 161	23	27
Dibenz[a,h]acridine	ND		28.4	26.0	F2	ug/L		91	42 - 147	51	40
Dibenzofuran	ND		28.4	25.8		ug/L		91	18 - 157	22	29
3,3'-Dichlorobenzidine	ND	*	37.9	24.4		ug/L		64	10 - 172	25	58
2,4-Dichlorophenol	ND		28.4	20.3		ug/L		71	16 - 147	14	43
Diethyl phthalate	ND		28.4	28.9		ug/L		102	23 - 160	22	40
2,4-Dimethylphenol	ND		28.4	23.5		ug/L		83	25 - 146	17	47
Dimethyl phthalate	ND		28.4	25.3		ug/L		89	11 - 158	21	36
Di-n-butyl phthalate	ND		28.4	27.2		ug/L		96	28 - 162	22	32
4,6-Dinitro-ortho-cresol	ND		56.9	54.1		ug/L		95	10 - 168	29	42
2,4-Dinitrophenol	ND		56.9	61.8	F2	ug/L		109	10 - 166	38	36
2,4-Dinitrotoluene	ND		28.4	26.2		ug/L		92	26 - 158	27	28
2,6-Dinitrotoluene	ND		28.4	25.1		ug/L		88	19 - 157	24	28
Di-n-octyl phthalate	ND		28.4	24.4		ug/L		86	42 - 150	20	35
1,4-Dioxane	ND		28.4	8.30	J	ug/L		29	10 - 130	4	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.4	22.1		ug/L		78	19 - 162	18	40
Hexachlorobenzene	ND	*	28.4	27.5		ug/L		97	45 - 145	19	33
Hexachlorocyclopentadiene	ND		28.4	12.9	J	ug/L		45	10 - 151	39	50
Hexachloroethane	ND		28.4	16.6		ug/L		58	29 - 130	18	41
Indene	ND		28.4	17.8		ug/L		63	22 - 130	21	40
Isophorone	ND		28.4	16.8		ug/L		59	24 - 144	17	33
2-Methylphenol	ND		28.4	24.4		ug/L		86	22 - 130	12	47
3 & 4 Methylphenol	ND		28.4	27.0		ug/L		95	31 - 130	4	47
2-Nitroaniline	ND		28.4	21.7		ug/L		76	10 - 162	20	33
3-Nitroaniline	ND		28.4	35.7		ug/L		126	10 - 163	15	39
4-Nitroaniline	ND	*	28.4	28.9		ug/L		102	10 - 162	37	50
Nitrobenzene	ND		28.4	20.8		ug/L		73	34 - 135	11	35
2-Nitrophenol	ND		28.4	16.4		ug/L		58	27 - 134	18	43
4-Nitrophenol	ND		56.9	64.3		ug/L		113	10 - 175	29	82
N-Nitrosodimethylamine	ND		28.4	36.1		ug/L		127	10 - 139	5	62
N-Nitrosodi-n-propylamine	ND		28.4	22.4		ug/L		79	13 - 147	19	36
N-Nitrosodiphenylamine	ND		28.2	25.5		ug/L		90	31 - 150	22	34
Pentachlorophenol	ND		56.9	52.3		ug/L		92	10 - 180	26	42
Phenol	ND		28.4	16.3		ug/L		57	23 - 130	11	52
Pyridine	ND		56.9	27.1		ug/L		48	10 - 130	18	55
Quinoline	ND		28.4	20.8		ug/L		73	10 - 180	26	40
2,4,5-Trichlorophenol	ND		28.4	28.2		ug/L		99	43 - 137	22	42
2,4,6-Trichlorophenol	ND		28.4	21.1		ug/L		74	42 - 135	16	44

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

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448422

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	79		34 - 120
2-Fluorophenol	33		10 - 120
Nitrobenzene-d5	56		27 - 120
Phenol-d5	48		10 - 120
Terphenyl-d14	82		53 - 125
2,4,6-Tribromophenol	88		15 - 135

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

Lab Sample ID: MB 400-447641/1-A
Matrix: Water
Analysis Batch: 448495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 447641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
Anthracene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Chrysene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Fluoranthene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
Fluorene	ND		0.20	0.021	ug/L		07/11/19 17:18	07/18/19 09:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/11/19 17:18	07/18/19 09:53	1
Phenanthrene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
Pyrene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/11/19 17:18	07/18/19 09:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	0	X	33 - 138	07/11/19 17:18	07/18/19 09:53	1
2-Fluorobiphenyl	0	X	15 - 122	07/11/19 17:18	07/18/19 09:53	1
Nitrobenzene-d5	NaN		19 - 130	07/11/19 17:18	07/18/19 09:53	1

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448495

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		28.6	22.7		ug/L		79	35 - 113
Acenaphthylene	ND		28.6	21.4		ug/L		75	41 - 118
Anthracene	0.036	J	28.6	22.2		ug/L		78	45 - 122
Benzo[a]anthracene	ND		28.6	20.2		ug/L		71	55 - 133
Benzo[a]pyrene	ND	*	28.6	22.2		ug/L		78	50 - 108
Benzo[b]fluoranthene	ND	*	28.6	25.6		ug/L		90	50 - 128

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

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448495

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	ND	*	28.6	18.1		ug/L		63	46 - 133
Benzo[k]fluoranthene	ND	*	28.6	24.1		ug/L		84	52 - 128
Chrysene	ND		28.6	20.7		ug/L		72	52 - 116
Dibenz(a,h)anthracene	ND	*	28.6	20.2		ug/L		71	52 - 143
Fluoranthene	0.053	J	28.6	22.6		ug/L		79	32 - 150
Fluorene	ND		28.6	23.2		ug/L		81	15 - 150
Indeno[1,2,3-cd]pyrene	ND	*	28.6	19.5		ug/L		68	41 - 141
Phenanthrene	0.029	J	28.6	21.5		ug/L		75	36 - 125
Pyrene	0.038	J	28.6	20.8		ug/L		73	41 - 127
1-Methylnaphthalene	ND		28.6	21.5		ug/L		75	10 - 150
2-Methylnaphthalene	0.030	J	28.6	20.6		ug/L		72	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*60*		*33 - 138*
2-Fluorobiphenyl	*59*		*15 - 122*
Nitrobenzene-d5	*48*		*19 - 130*

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448495

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 447641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.4	26.9		ug/L		95	35 - 113	17	49
Acenaphthylene	ND		28.4	25.7		ug/L		90	41 - 118	18	48
Anthracene	0.036	J	28.4	26.7		ug/L		94	45 - 122	19	56
Benzo[a]anthracene	ND		28.4	24.5		ug/L		86	55 - 133	19	57
Benzo[a]pyrene	ND	*	28.4	27.2		ug/L		96	50 - 108	20	59
Benzo[b]fluoranthene	ND	*	28.4	31.1		ug/L		109	50 - 128	19	62
Benzo[g,h,i]perylene	ND	*	28.4	21.6		ug/L		76	46 - 133	17	58
Benzo[k]fluoranthene	ND	*	28.4	28.8		ug/L		101	52 - 128	18	58
Chrysene	ND		28.4	25.9		ug/L		91	52 - 116	22	59
Dibenz(a,h)anthracene	ND	*	28.4	24.3		ug/L		85	52 - 143	18	60
Fluoranthene	0.053	J	28.4	27.3		ug/L		96	32 - 150	19	59
Fluorene	ND		28.4	27.9		ug/L		98	15 - 150	19	49
Indeno[1,2,3-cd]pyrene	ND	*	28.4	23.4		ug/L		82	41 - 141	18	58
Phenanthrene	0.029	J	28.4	26.1		ug/L		92	36 - 125	20	69
Pyrene	0.038	J	28.4	24.1		ug/L		85	41 - 127	15	58
1-Methylnaphthalene	ND		28.4	24.9		ug/L		87	10 - 150	14	66
2-Methylnaphthalene	0.030	J	28.4	24.3		ug/L		86	10 - 150	17	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*80*		*33 - 138*
2-Fluorobiphenyl	*79*		*15 - 122*
Nitrobenzene-d5	*55*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-448201/1-A
Matrix: Water
Analysis Batch: 448291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448201

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		07/16/19 12:15	07/16/19 17:11	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/16/19 12:15	07/16/19 17:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*07/16/19 12:15*	*07/16/19 17:11*	*1*

Lab Sample ID: LCS 400-448201/2-A
Matrix: Water
Analysis Batch: 448291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.119		ug/L		119	60 - 140
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*51 - 149*

Lab Sample ID: 400-172846-6 MS
Matrix: Water
Analysis Batch: 448291

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 448201

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F1	0.0956	0.192	F1	ug/L		201	65 - 135
1,2-Dibromoethane	ND		0.0956	0.103		ug/L		107	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*51 - 149*

Lab Sample ID: 400-172846-6 MSD
Matrix: Water
Analysis Batch: 448291

Client Sample ID: MW16-ROX-070919
Prep Type: Total/NA
Prep Batch: 448201

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	0.0972	0.169	F1	ug/L		174	65 - 135	13	20
1,2-Dibromoethane	ND		0.0972	0.0941		ug/L		97	65 - 135	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*51 - 149*

Lab Sample ID: MB 400-448410/1-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448410

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		07/17/19 13:20	07/17/19 16:11	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/17/19 13:20	07/17/19 16:11	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-448410/1-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448410

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	113		51 - 149	07/17/19 13:20	07/17/19 16:11	1

Lab Sample ID: LCS 400-448410/2-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.185	*	ug/L		185	60 - 140
1,2-Dibromoethane	0.100	0.122		ug/L		122	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	106		51 - 149

Shell Oil Products US Chain Of Custody Record

400-172846 COC

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	☐ CHECK IF NO INCIDENT # APPLIES DATE: 7/9/19
PO #	GSAP Project ID	PAGE: 1 of 2
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60592794 - 1.03.003 / 60592794 - 1.03.0033
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel
PHONE NO: 314-802-1171
E MAIL: elizabeth.kunkel@aecom.com
AECOM Office ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): T. Jones B. Howell
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
EDF To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL
	TB-Rox-070919-8260-B	7/9/19	0000	Water	X					2	2			
	TB-Rox-070919-8011-B	7/9/19	0000		X					2			2	
	P114R-Rox-070919-EB		0845		X			X		6	2	1	2	1
	P114R-Rox-070919		0935		X			X		6	2	1	2	1
	MW13-ROX-070919		1020		X			X		6	2	1	2	1
	MW16-Rox-070919		1145		X			X		6	2	1	2	1
	MW16-Rox-070919-MS		1145		X			X		6	2	1	2	1
	MW16-Rox-070919-MSD		1145		X			X		6	2	1	2	1
	MW2-ROX-070919		1245		X			X		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
B. Howell	1054 5423 6414 / 1054 5423 6436 / 1054 5423 6425 / 1054 5423 6447 Fedex	7/9/19	1800
Relinquished by (Signature)	Received by (Signature)	Date	Time
Relinquished by (Signature)	Received by (Signature)	7/10/19	8:59

Version 14Dec15

custody seal #'s: 758498, 758499, 758496, 758497, 758494, 758495, 758492, 758493

DRY 2.1°C, 5.1°C, .3°C, 1.2°C

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7/29/2019

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**
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/9/19

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 — 60592794 - 1.03.003 / 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel — PHONE NO.: 314-802-1171 — E-MAIL: elizabeth.kunkel@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): I. Partin J. Rogatz

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 ☐ 7 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL
	TB-ROX-070919-8260-A	7/9/19	0000	Water	X					2	2			
	TB-ROX-070919-8011-A		0000		X					2			2	
	P54-ROX-070919-EB		0945		X			X		6	2	1	2	1
	P54-ROX-070919		1025		X			X		6	2	1	2	1
	MW24-ROX-070919		1115		X			X		6	2	1	2	1
	MW11-ROX-070919		1210		X			X		6	2	1	2	1
	MW27-ROX-070919		1255		X			X		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
[signature]	Fedex Same @S pg. 1	7/9/19	1800
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature) [signature]	Date 7/10/19	Time 8:59

Version 14Dec15

Custody seals #: same as page 1

IR 7 2.1°C, 5.1°C, .3°C, 1.2°C

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7/29/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-172846-1

Login Number: 172846
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	2.1°C 5.1°C 0.3°C 1.2°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-172846-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-172966-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 7/31/2019

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

Sample Identification	Sample Identification
TB-ROX-071019-8260-BP	TB-ROX-071019-8011-BP
MW23-ROX-071019	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated bis(2-ethylhexyl) phthalate was detected in the method blank. The LCS and/or LCSD recoveries for benzenethiol, 3,3'-dichlorobenzidine, and 1,2-dibromo-3-chloropropane were outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in sample MW23-ROX-071019. The continuing calibration verification for dibenz[a,h]acridine was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-448199/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	13.6 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
MW23-ROX-071019	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/LCSD 400-448199/2-A/3-A	SVOCs	Benzenethiol	**5/4**	24	10-120/30
LCS 400-448199/4-A	SVOCs	3,3'-Dichlorobenzidine	**138**	NA	39-135
LCS 400-448410/2-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**185**	NA	60-140

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-448199/2-A/3-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-071019	SVOCs	Benzenethiol	UJ

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW23-ROX-071019	SVOCs	Terphenyl-d_{14}	**52**	53-125

Qualifications due to surrogate recoveries were not required if only one of three base/neutral fraction surrogate recoveries were outside evaluation criteria in the associated SVOC 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?

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.

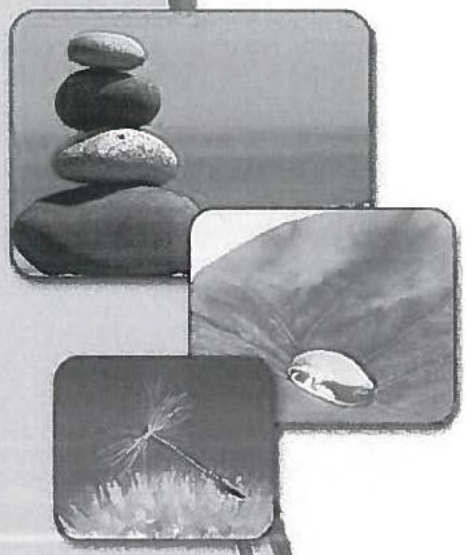
12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for dibenz[a,h]acridine was outside evaluation criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-071019	PAHs	Dibenz[a,h]acridine	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-172966-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
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Attn: Elizabeth Kunkel

Authorized for release by:
7/25/2019 1:43:59 PM

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Reviewed 7/31/2019 LR

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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: 400-172966-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-172966-1

Comments
No additional comments.

Receipt
The samples were received on 7/11/2019 9:39 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.4° C, 3.5° C and 5.8° C.

GC/MS VOA
Method(s) 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-071019-8260-BP (400-172966-1) and MW23-ROX-071019 (400-172966-3). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrylonitrile and Acrolein, an acid-labile compound that degrades in an acidic medium.

Method(s) 8260B: The initial calibration verification (ICV) analyzed in batch 400-441311 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-448199 and analytical batch 400-448687 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(s) 8270D: The method blank for preparation batch 400-448199 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). The samples associated with this method blank were either non-detect or less than the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 400-448199 and analytical batch 400-448687 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448687 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448687 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Chloro-3-methylphenol and Aniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448687 recovered outside acceptance criteria, low biased, for Dibenz[a,h]acridine. 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(s) 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: MW23-ROX-071019 (400-172966-3). These results have been reported and qualified.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-448954 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 400-448954/3).

Job ID: 400-172966-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

GC Semi VOA
Method(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448449 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(s) 8011: The laboratory control sample (LCS) for preparation batch 400-448410 and analytical batch 400-448449 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448449 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 following sample is impacted: (CCV 400-448449/2).

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: 400-172966-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-172966-1	TB-ROX-071019-8260-BP	Water	07/10/19 00:00	07/11/19 09:39	
400-172966-2	TB-ROX-071019-8011-BP	Water	07/10/19 00:00	07/11/19 09:39	
400-172966-3	MW23-ROX-071019	Water	07/10/19 09:50	07/11/19 09:39	

Detection Summary

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

Job ID: 400-172966-1

Client Sample ID: TB-ROX-071019-8260-BP — Lab Sample ID: 400-172966-1

No Detections.

Client Sample ID: TB-ROX-071019-8011-BP — Lab Sample ID: 400-172966-2

No Detections.

Client Sample ID: MW23-ROX-071019 — Lab Sample ID: 400-172966-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.6		1.0	0.74	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	~~9.5~~	J B U	10	5.2	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: 400-172966-1

Client Sample ID: TB-ROX-071019-8260-BP
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-1
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			07/15/19 21:38	1
Acrolein	ND		20	10	ug/L			07/15/19 21:38	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/19 21:38	1
Benzene	ND		1.0	0.38	ug/L			07/15/19 21:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/19 21:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/19 21:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Bromoform	ND		5.0	0.71	ug/L			07/15/19 21:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/19 21:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/19 21:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/19 21:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/19 21:38	1
Chloroform	ND		1.0	0.60	ug/L			07/15/19 21:38	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/15/19 21:38	1
Chloromethane	ND		1.0	0.83	ug/L			07/15/19 21:38	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/19 21:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/19 21:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/19 21:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/19 21:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/19 21:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/19 21:38	1
2-Hexanone	ND		25	3.1	ug/L			07/15/19 21:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/19 21:38	1
Methylene bromide	ND		5.0	0.59	ug/L			07/15/19 21:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/19 21:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/19 21:38	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/15/19 21:38	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/15/19 21:38	1
Naphthalene	ND		1.0	1.0	ug/L			07/15/19 21:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/19 21:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/19 21:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/19 21:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/19 21:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/19 21:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/19 21:38	1

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

Job ID: 400-172966-1

Client Sample ID: TB-ROX-071019-8260-BP
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-1
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			07/15/19 21:38	1
Styrene	ND		1.0	1.0	ug/L			07/15/19 21:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/19 21:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/15/19 21:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/15/19 21:38	1
Toluene	ND		1.0	0.41	ug/L			07/15/19 21:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/19 21:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/15/19 21:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/19 21:38	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/15/19 21:38	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/15/19 21:38	1
Trichloroethene	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/15/19 21:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/19 21:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/19 21:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/19 21:38	1
Vinyl acetate	ND		25	2.0	ug/L			07/15/19 21:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/19 21:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/19 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/15/19 21:38*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/15/19 21:38*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/15/19 21:38*	*1*

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

Job ID: 400-172966-1

Client Sample ID: TB-ROX-071019-8011-BP
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.029	0.0053	ug/L		07/17/19 13:20	07/17/19 17:20	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/17/19 13:20	07/17/19 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*07/17/19 13:20*	*07/17/19 17:20*	*1*

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

Job ID: 400-172966-1

Client Sample ID: MW23-ROX-071019
Date Collected: 07/10/19 09:50
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-3
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			07/15/19 22:57	1
Acrolein	ND		20	10	ug/L			07/15/19 22:57	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/19 22:57	1
Benzene	ND		1.0	0.38	ug/L			07/15/19 22:57	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/19 22:57	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/19 22:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Bromoform	ND		5.0	0.71	ug/L			07/15/19 22:57	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/19 22:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/19 22:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/19 22:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/19 22:57	1
Chloroform	ND		1.0	0.60	ug/L			07/15/19 22:57	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/15/19 22:57	1
Chloromethane	ND		1.0	0.83	ug/L			07/15/19 22:57	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/19 22:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/19 22:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/19 22:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/19 22:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/19 22:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/19 22:57	1
2-Hexanone	ND		25	3.1	ug/L			07/15/19 22:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/19 22:57	1
Methylene bromide	ND		5.0	0.59	ug/L			07/15/19 22:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/19 22:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/19 22:57	1
Methyl tert-butyl ether	1.6		1.0	0.74	ug/L			07/15/19 22:57	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/15/19 22:57	1
Naphthalene	ND		1.0	1.0	ug/L			07/15/19 22:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/19 22:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/19 22:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/19 22:57	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/19 22:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/19 22:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/19 22:57	1

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

Job ID: 400-172966-1

Client Sample ID: MW23-ROX-071019
Date Collected: 07/10/19 09:50
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-3
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			07/15/19 22:57	1
Styrene	ND		1.0	1.0	ug/L			07/15/19 22:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/19 22:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/15/19 22:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/15/19 22:57	1
Toluene	ND		1.0	0.41	ug/L			07/15/19 22:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/19 22:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/15/19 22:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/19 22:57	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/15/19 22:57	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/15/19 22:57	1
Trichloroethene	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/15/19 22:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/19 22:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/19 22:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/19 22:57	1
Vinyl acetate	ND		25	2.0	ug/L			07/15/19 22:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/19 22:57	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/19 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/15/19 22:57*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*07/15/19 22:57*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/15/19 22:57*	*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		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
Acenaphthylene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
Anthracene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
Benzo[a]anthracene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Benzo[a]pyrene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Benzo[b]fluoranthene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Benzo[g,h,i]perylene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Benzo[k]fluoranthene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Chrysene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Dibenz(a,h)anthracene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Fluoranthene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
Fluorene	ND		0.21	0.022	ug/L		07/16/19 12:05	07/22/19 14:11	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.041	ug/L		07/16/19 12:05	07/22/19 14:11	1
Phenanthrene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
Pyrene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1
2-Methylnaphthalene	ND		0.21	0.021	ug/L		07/16/19 12:05	07/22/19 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*33 - 138*	*07/16/19 12:05*	*07/22/19 14:11*	*1*
2-Fluorobiphenyl	*94*		*15 - 122*	*07/16/19 12:05*	*07/22/19 14:11*	*1*

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

Job ID: 400-172966-1

Client Sample ID: MW23-ROX-071019
Date Collected: 07/10/19 09:50
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	77		19 - 130	07/16/19 12:05	07/22/19 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/16/19 12:05	07/19/19 16:33	1
Benzenethiol	ND	* UJ	10	1.8	ug/L		07/16/19 12:05	07/19/19 16:33	1
Benzoic acid	ND		31	7.6	ug/L		07/16/19 12:05	07/19/19 16:33	1
Benzyl alcohol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 16:33	1
Bis(2-chloroethoxy)methane	ND		10	0.72	ug/L		07/16/19 12:05	07/19/19 16:33	1
Bis(2-chloroethyl)ether	ND		10	0.77	ug/L		07/16/19 12:05	07/19/19 16:33	1
bis (2-chloroisopropyl) ether	ND		10	0.84	ug/L		07/16/19 12:05	07/19/19 16:33	1
Bis(2-ethylhexyl) phthalate	~~9.5~~	J B U	10	5.2	ug/L		07/16/19 12:05	07/19/19 16:33	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		07/16/19 12:05	07/19/19 16:33	1
Butyl benzyl phthalate	ND		10	0.72	ug/L		07/16/19 12:05	07/19/19 16:33	1
4-Chloroaniline	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 16:33	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/16/19 12:05	07/19/19 16:33	1
2-Chloronaphthalene	ND		10	0.54	ug/L		07/16/19 12:05	07/19/19 16:33	1
2-Chlorophenol	ND		10	2.3	ug/L		07/16/19 12:05	07/19/19 16:33	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 16:33	1
Dibenz[a,h]acridine	ND	UJ	10	3.1	ug/L		07/16/19 12:05	07/19/19 16:33	1
Dibenzofuran	ND		10	0.54	ug/L		07/16/19 12:05	07/19/19 16:33	1
3,3'-Dichlorobenzidine	ND	*	10	2.7	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/16/19 12:05	07/19/19 16:33	1
Diethyl phthalate	ND		10	0.73	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/16/19 12:05	07/19/19 16:33	1
Dimethyl phthalate	ND		10	0.62	ug/L		07/16/19 12:05	07/19/19 16:33	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/16/19 12:05	07/19/19 16:33	1
4,6-Dinitro-ortho-cresol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 16:33	1
Di-n-octyl phthalate	ND		10	0.46	ug/L		07/16/19 12:05	07/19/19 16:33	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 16:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 16:33	1
Hexachlorobenzene	ND		10	0.26	ug/L		07/16/19 12:05	07/19/19 16:33	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/16/19 12:05	07/19/19 16:33	1
Hexachloroethane	ND		10	4.4	ug/L		07/16/19 12:05	07/19/19 16:33	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 16:33	1
Isophorone	ND		10	0.59	ug/L		07/16/19 12:05	07/19/19 16:33	1
2-Methylphenol	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 16:33	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/16/19 12:05	07/19/19 16:33	1
2-Nitroaniline	ND		10	2.3	ug/L		07/16/19 12:05	07/19/19 16:33	1
3-Nitroaniline	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 16:33	1
4-Nitroaniline	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 16:33	1
Nitrobenzene	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 16:33	1
2-Nitrophenol	ND		10	0.67	ug/L		07/16/19 12:05	07/19/19 16:33	1
4-Nitrophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 16:33	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/16/19 12:05	07/19/19 16:33	1

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

Job ID: 400-172966-1

Client Sample ID: MW23-ROX-071019
Date Collected: 07/10/19 09:50
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172966-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 16:33	1
N-Nitrosodiphenylamine	ND		10	0.49	ug/L		07/16/19 12:05	07/19/19 16:33	1
Pentachlorophenol	ND		21	1.9	ug/L		07/16/19 12:05	07/19/19 16:33	1
Phenol	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 16:33	1
Pyridine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 16:33	1
Quinoline	ND		10	6.2	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 16:33	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/16/19 12:05	07/19/19 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*34 - 120*	*07/16/19 12:05*	*07/19/19 16:33*	*1*
2-Fluorophenol	*37*		*10 - 120*	*07/16/19 12:05*	*07/19/19 16:33*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*07/16/19 12:05*	*07/19/19 16:33*	*1*
Phenol-d5	*49*		*10 - 120*	*07/16/19 12:05*	*07/19/19 16:33*	*1*
Terphenyl-d14	*52*	*X*	*53 - 125*	*07/16/19 12:05*	*07/19/19 16:33*	*1*
2,4,6-Tribromophenol	*56*		*15 - 135*	*07/16/19 12:05*	*07/19/19 16:33*	*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	*	0.029	0.0054	ug/L		07/17/19 13:20	07/17/19 17:43	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/17/19 13:20	07/17/19 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*51 - 149*	*07/17/19 13:20*	*07/17/19 17:43*	*1*

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

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

Surrogate Summary

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

Job ID: 400-172966-1

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)
400-172966-1	TB-ROX-071019-8260-BP	111	99	99
400-172966-3	MW23-ROX-071019	112	97	100
LCS 400-448026/1002	Lab Control Sample	108	98	93
MB 400-448026/24	Method Blank	111	94	104

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)
400-172966-3	MW23-ROX-071019	62	37	79	49	52 X	56
LCS 400-448199/2-A	Lab Control Sample	67	38	91	68	84	47
LCS 400-448199/4-A	Lab Control Sample	68	62	97	76	82	78
LCSD 400-448199/3-A	Lab Control Sample Dup	68	34	91	68	86	45
MB 400-448199/1-A	Method Blank	73	39	96	71	92	65

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)
400-172966-3	MW23-ROX-071019	86	94	77
LCS 400-448199/4-A	Lab Control Sample	99	88	88
MB 400-448199/1-A	Method Blank	89	72	70

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)
400-172966-2	TB-ROX-071019-8011-BP	100

Surrogate Summary

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

Job ID: 400-172966-1

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)
400-172966-3	MW23-ROX-071019	111
LCS 400-448410/2-A	Lab Control Sample	106
MB 400-448410/1-A	Method Blank	113

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-172966-1

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: 400-172966-1

Client Sample ID: TB-ROX-071019-8260-BP

Lab Sample ID: 400-172966-1
Matrix: Water

Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448026	07/15/19 21:38	BSW	TAL PEN

Client Sample ID: TB-ROX-071019-8011-BP

Lab Sample ID: 400-172966-2
Matrix: Water

Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.2 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 17:20	DS	TAL PEN

Client Sample ID: MW23-ROX-071019

Lab Sample ID: 400-172966-3
Matrix: Water

Date Collected: 07/10/19 09:50
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448026	07/15/19 22:57	BSW	TAL PEN
Total/NA	Prep	3520C			964.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 16:33	VC1	TAL PEN
Total/NA	Prep	3520C			964.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448954	07/22/19 14:11	S1S	TAL PEN
Total/NA	Prep	8011			35.6 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 17:43	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448026/24
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	448026	07/15/19 18:33	BSW	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448199/1-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 13:42	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448502	07/18/19 14:09	KJA	TAL PEN

Lab Chronicle

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

Job ID: 400-172966-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448410/1-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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 16:11	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448026/1002
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	448026	07/15/19 17:30	BSW	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448199/2-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 14:03	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448199/4-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 14:46	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			448502	07/18/19 14:25	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-448410/2-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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 16:34	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-448199/3-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 14:25	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: 400-172966-1

GC/MS VOA

Analysis Batch: 448026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172966-1	TB-ROX-071019-8260-BP	Total/NA	Water	8260B	
400-172966-3	MW23-ROX-071019	Total/NA	Water	8260B	
MB 400-448026/24	Method Blank	Total/NA	Water	8260B	
LCS 400-448026/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 448199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172966-3	MW23-ROX-071019	Total/NA	Water	3520C	
MB 400-448199/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-448199/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-448199/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-448199/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 448502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-448199/1-A	Method Blank	Total/NA	Water	8270D LL	448199
LCS 400-448199/4-A	Lab Control Sample	Total/NA	Water	8270D LL	448199

Analysis Batch: 448687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172966-3	MW23-ROX-071019	Total/NA	Water	8270D	448199
MB 400-448199/1-A	Method Blank	Total/NA	Water	8270D	448199
LCS 400-448199/2-A	Lab Control Sample	Total/NA	Water	8270D	448199
LCS 400-448199/4-A	Lab Control Sample	Total/NA	Water	8270D	448199
LCSD 400-448199/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	448199

Analysis Batch: 448954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172966-3	MW23-ROX-071019	Total/NA	Water	8270D LL	448199

GC Semi VOA

Prep Batch: 448410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172966-2	TB-ROX-071019-8011-BP	Total/NA	Water	8011	
400-172966-3	MW23-ROX-071019	Total/NA	Water	8011	
MB 400-448410/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448410/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 448449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172966-2	TB-ROX-071019-8011-BP	Total/NA	Water	8011	448410
400-172966-3	MW23-ROX-071019	Total/NA	Water	8011	448410
MB 400-448410/1-A	Method Blank	Total/NA	Water	8011	448410
LCS 400-448410/2-A	Lab Control Sample	Total/NA	Water	8011	448410

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

Lab Sample ID: MB 400-448026/24
Matrix: Water
Analysis Batch: 448026

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/15/19 18:33	1
Acrolein	ND		20	10	ug/L			07/15/19 18:33	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/19 18:33	1
Benzene	ND		1.0	0.38	ug/L			07/15/19 18:33	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/19 18:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/19 18:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Bromoform	ND		5.0	0.71	ug/L			07/15/19 18:33	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/19 18:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/19 18:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/19 18:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/19 18:33	1
Chloroform	ND		1.0	0.60	ug/L			07/15/19 18:33	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/15/19 18:33	1
Chloromethane	ND		1.0	0.83	ug/L			07/15/19 18:33	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/19 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/19 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/19 18:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/19 18:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/19 18:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/19 18:33	1
2-Hexanone	ND		25	3.1	ug/L			07/15/19 18:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/19 18:33	1
Methylene bromide	ND		5.0	0.59	ug/L			07/15/19 18:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/19 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/19 18:33	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/15/19 18:33	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/15/19 18:33	1
Naphthalene	ND		1.0	1.0	ug/L			07/15/19 18:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/19 18:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/19 18:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/19 18:33	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/19 18:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/19 18:33	1

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

Lab Sample ID: MB 400-448026/24
Matrix: Water
Analysis Batch: 448026

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/19 18:33	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/15/19 18:33	1
Styrene	ND		1.0	1.0	ug/L			07/15/19 18:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/19 18:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/15/19 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/15/19 18:33	1
Toluene	ND		1.0	0.41	ug/L			07/15/19 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/19 18:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/15/19 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/19 18:33	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/15/19 18:33	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/15/19 18:33	1
Trichloroethene	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/15/19 18:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/19 18:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/19 18:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/19 18:33	1
Vinyl acetate	ND		25	2.0	ug/L			07/15/19 18:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/19 18:33	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/19 18:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/15/19 18:33*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*07/15/19 18:33*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/15/19 18:33*	*1*

Lab Sample ID: LCS 400-448026/1002
Matrix: Water
Analysis Batch: 448026

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	223		ug/L		112	43 - 160
Acrolein	500	607		ug/L		121	38 - 160
Acrylonitrile	500	507		ug/L		101	64 - 142
Benzene	50.0	51.8		ug/L		104	70 - 130
Bromobenzene	50.0	49.4		ug/L		99	70 - 132
Bromochloromethane	50.0	45.5		ug/L		91	70 - 130
Bromodichloromethane	50.0	46.4		ug/L		93	67 - 133
Bromoform	50.0	45.8		ug/L		92	57 - 140
Bromomethane	50.0	29.2		ug/L		58	10 - 160
2-Butanone (MEK)	200	257		ug/L		129	61 - 145
Carbon disulfide	50.0	42.6		ug/L		85	61 - 137
Carbon tetrachloride	50.0	45.8		ug/L		92	61 - 137
Chlorobenzene	50.0	49.7		ug/L		99	70 - 130
Dibromochloromethane	50.0	47.7		ug/L		95	67 - 135
Chloroethane	50.0	47.2		ug/L		94	55 - 141

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

Lab Sample ID: LCS 400-448026/1002
Matrix: Water
Analysis Batch: 448026

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	33.0		ug/L		66	10 - 160
Chloroform	50.0	48.5		ug/L		97	69 - 130
1-Chlorohexane	50.0	46.8		ug/L		94	69 - 130
Chloromethane	50.0	52.4		ug/L		105	58 - 137
cis-1,2-Dichloroethene	50.0	49.4		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	49.1		ug/L		98	69 - 132
1,2-Dichlorobenzene	50.0	47.8		ug/L		96	67 - 130
1,3-Dichlorobenzene	50.0	49.3		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.0		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	52.0		ug/L		104	41 - 146
1,1-Dichloroethane	50.0	49.2		ug/L		98	70 - 130
1,2-Dichloroethane	50.0	48.3		ug/L		97	69 - 130
1,1-Dichloroethene	50.0	44.7		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	52.6		ug/L		105	70 - 130
1,3-Dichloropropane	50.0	50.2		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	44.7		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	49.2		ug/L		98	70 - 130
Ethylbenzene	50.0	47.2		ug/L		94	70 - 130
Ethyl methacrylate	50.0	47.3		ug/L		95	68 - 130
Hexachlorobutadiene	50.0	55.0		ug/L		110	53 - 140
2-Hexanone	200	222		ug/L		111	65 - 137
Isopropylbenzene	50.0	47.2		ug/L		94	70 - 130
Methylene bromide	50.0	48.1		ug/L		96	70 - 130
Methylene Chloride	50.0	53.7		ug/L		107	66 - 135
4-Methyl-2-pentanone (MIBK)	200	201		ug/L		101	69 - 138
Methyl tert-butyl ether	50.0	47.1		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	48.6		ug/L		97	70 - 130
Naphthalene	50.0	43.1		ug/L		86	47 - 149
n-Butylbenzene	50.0	48.7		ug/L		97	67 - 130
N-Propylbenzene	50.0	51.2		ug/L		102	70 - 130
o-Chlorotoluene	50.0	52.5		ug/L		105	70 - 130
o-Xylene	50.0	46.4		ug/L		93	70 - 130
p-Chlorotoluene	50.0	51.6		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	51.0		ug/L		102	65 - 130
sec-Butylbenzene	50.0	49.8		ug/L		100	66 - 130
Styrene	50.0	44.8		ug/L		90	70 - 130
tert-Butylbenzene	50.0	49.3		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.0		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.5		ug/L		113	70 - 131
Tetrachloroethene	50.0	42.8		ug/L		86	65 - 130
Toluene	50.0	48.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	44.9		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	47.9		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	47.1		ug/L		94	60 - 140
1,1,1-Trichloroethane	50.0	46.8		ug/L		94	68 - 130
1,1,2-Trichloroethane	50.0	49.3		ug/L		99	70 - 130
Trichloroethene	50.0	48.8		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	46.8		ug/L		94	65 - 138

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

Lab Sample ID: LCS 400-448026/1002
Matrix: Water
Analysis Batch: 448026

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	53.6		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	50.0	50.8		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	52.9		ug/L		106	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	54.2		ug/L		108	59 - 136
Xylenes, Total	100	95.0		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*93*		*80 - 120*

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
Benzenethiol	ND		10	1.7	ug/L		07/16/19 12:05	07/19/19 13:42	1
Benzoic acid	ND		30	7.3	ug/L		07/16/19 12:05	07/19/19 13:42	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 13:42	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/16/19 12:05	07/19/19 13:42	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/16/19 12:05	07/19/19 13:42	1
Bis(2-ethylhexyl) phthalate	13.6		10	5.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 13:42	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Dibenzofuran	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 13:42	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Diethyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 13:42	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/16/19 12:05	07/19/19 13:42	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 13:42	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 13:42	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 13:42	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 13:42	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 13:42	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Isophorone	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 13:42	1
Nitrobenzene	ND		10	0.55	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Nitrophenol	ND		10	0.65	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 13:42	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 13:42	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 13:42	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 13:42	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 13:42	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
Quinoline	ND		10	6.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 13:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
2-Fluorophenol	*39*		*10 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
Nitrobenzene-d5	*96*		*27 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
Phenol-d5	*71*		*10 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
Terphenyl-d14	*92*		*53 - 125*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*07/16/19 12:05*	*07/19/19 13:42*	*1*

Lab Sample ID: LCS 400-448199/2-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		5	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*38*		*10 - 120*
Nitrobenzene-d5	*91*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*84*		*53 - 125*
2,4,6-Tribromophenol	*47*		*15 - 135*

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

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	33.0		ug/L		110	29 - 120
Benzoic acid	117	45.3		ug/L		39	10 - 150
Benzyl alcohol	30.0	28.7		ug/L		96	19 - 125
Bis(2-chloroethoxy)methane	30.0	24.6		ug/L		82	45 - 120
Bis(2-chloroethyl)ether	30.0	20.8		ug/L		69	48 - 120
bis (2-chloroisopropyl) ether	30.0	26.6		ug/L		89	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	37.7		ug/L		126	48 - 150
4-Bromophenyl phenyl ether	30.0	24.6		ug/L		82	55 - 122
Butyl benzyl phthalate	30.0	26.2		ug/L		87	46 - 145
4-Chloroaniline	30.0	28.4		ug/L		95	30 - 120
4-Chloro-3-methylphenol	30.0	30.2		ug/L		101	39 - 140
2-Chloronaphthalene	30.0	24.1		ug/L		80	52 - 120
2-Chlorophenol	30.0	26.3		ug/L		88	34 - 120
4-Chlorophenyl phenyl ether	30.0	24.3		ug/L		81	58 - 124
Dibenz[a,h]acridine	30.0	16.6		ug/L		55	46 - 149
Dibenzofuran	30.0	24.9		ug/L		83	58 - 123
3,3'-Dichlorobenzidine	40.0	55.0	*	ug/L		138	39 - 135
2,4-Dichlorophenol	30.0	29.1		ug/L		97	39 - 128
Diethyl phthalate	30.0	28.4		ug/L		95	44 - 146
2,4-Dimethylphenol	30.0	27.5		ug/L		92	44 - 120
Dimethyl phthalate	30.0	26.9		ug/L		90	50 - 131
Di-n-butyl phthalate	30.0	29.4		ug/L		98	55 - 131
4,6-Dinitro-ortho-cresol	60.0	67.8		ug/L		113	10 - 150
2,4-Dinitrophenol	60.0	76.7		ug/L		128	10 - 150
2,4-Dinitrotoluene	30.0	28.3		ug/L		94	58 - 140
2,6-Dinitrotoluene	30.0	27.8		ug/L		93	57 - 130
Di-n-octyl phthalate	30.0	27.7		ug/L		92	50 - 150
1,4-Dioxane	30.0	18.6		ug/L		62	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	28.0		ug/L		93	47 - 123
Hexachlorobenzene	30.0	24.9		ug/L		83	52 - 131
Hexachlorocyclopentadiene	30.0	10.1	J	ug/L		34	10 - 129
Hexachloroethane	30.0	17.2		ug/L		57	41 - 120
Indene	30.0	22.5		ug/L		75	47 - 120
Isophorone	30.0	27.5		ug/L		92	49 - 120
2-Methylphenol	30.0	28.5		ug/L		95	39 - 123
3 & 4 Methylphenol	30.0	26.2		ug/L		87	38 - 121
2-Nitroaniline	30.0	33.4		ug/L		111	47 - 150
3-Nitroaniline	30.0	33.4		ug/L		111	34 - 132
4-Nitroaniline	30.0	34.3		ug/L		114	41 - 135
Nitrobenzene	30.0	27.9		ug/L		93	47 - 120
2-Nitrophenol	30.0	28.5		ug/L		95	28 - 136
4-Nitrophenol	60.0	56.5		ug/L		94	10 - 150
N-Nitrosodimethylamine	30.0	32.3		ug/L		108	22 - 148
N-Nitrosodi-n-propylamine	30.0	28.3		ug/L		94	44 - 120
N-Nitrosodiphenylamine	29.8	27.4		ug/L		92	56 - 120
Pentachlorophenol	60.0	54.8		ug/L		91	15 - 141
Phenol	30.0	22.2		ug/L		74	33 - 120
Pyridine	60.0	47.1		ug/L		78	26 - 120

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

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	27.2		ug/L		91	51 - 129
2,4,5-Trichlorophenol	30.0	27.8		ug/L		93	38 - 147
2,4,6-Trichlorophenol	30.0	27.9		ug/L		93	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*97*		*27 - 120*
Phenol-d5	*76*		*10 - 120*
Terphenyl-d14	*82*		*53 - 125*
2,4,6-Tribromophenol	*78*		*15 - 135*

Lab Sample ID: LCSD 400-448199/3-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120	24	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*34 - 120*
2-Fluorophenol	*34*		*10 - 120*
Nitrobenzene-d5	*91*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*86*		*53 - 125*
2,4,6-Tribromophenol	*45*		*15 - 135*

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Chrysene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/18/19 14:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*33 - 138*	*07/16/19 12:05*	*07/18/19 14:09*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*07/16/19 12:05*	*07/18/19 14:09*	*1*
Nitrobenzene-d5	*70*		*19 - 130*	*07/16/19 12:05*	*07/18/19 14:09*	*1*

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	30.3		ug/L		101	41 - 120
Acenaphthylene	30.0	30.5		ug/L		102	44 - 120
Anthracene	30.0	30.4		ug/L		101	49 - 120
Benzo[a]anthracene	30.0	28.5		ug/L		95	61 - 135
Benzo[a]pyrene	30.0	29.4		ug/L		98	52 - 120
Benzo[b]fluoranthene	30.0	31.1		ug/L		104	53 - 134
Benzo[g,h,i]perylene	30.0	32.2		ug/L		107	47 - 133
Benzo[k]fluoranthene	30.0	29.2		ug/L		97	57 - 134
Chrysene	30.0	29.3		ug/L		98	55 - 122
Dibenz(a,h)anthracene	30.0	33.4		ug/L		111	48 - 146
Fluoranthene	30.0	31.5		ug/L		105	54 - 128
Fluorene	30.0	32.5		ug/L		108	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	32.7		ug/L		109	43 - 142
Phenanthrene	30.0	31.0		ug/L		103	48 - 120
Pyrene	30.0	29.0		ug/L		97	48 - 132
1-Methylnaphthalene	30.0	24.7		ug/L		82	41 - 120
2-Methylnaphthalene	30.0	24.1		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*88*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-448410/1-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448410

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		07/17/19 13:20	07/17/19 16:11	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/17/19 13:20	07/17/19 16:11	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-448410/1-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448410

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	113		51 - 149	07/17/19 13:20	07/17/19 16:11	1

Lab Sample ID: LCS 400-448410/2-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.185	*	ug/L		185	60 - 140
1,2-Dibromoethane	0.100	0.122		ug/L		122	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	106		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
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 7/10/19
PAGE: 1 of 1

AUP/ISO COMPANY: AECOM
EDD CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60592794 - 1.03.003 / 60592794 - 1.03.0033
ADDRESS: 100 N. Broadway, 20th Floor, ST. LOUIS, MO 63102, USA
DELIVERABLES TO (Name, Company, Office Location): elizabeth.kunkel@aecom.com
PHONE NO.: 314-802-1172
E-MAIL:
AECOM Shell ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): J. Ragatz I. Portis
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
INVOICE TO CONTACT E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL
	TB-ROX-071019-8260-BP	7/10/19	0000	WATER	X					2	2			
	TB-ROX-071019-8011-BP		0000		X					2			2	
	MW23-ROX-071019		0950		X			X		6	2	1	2	1

400-172968 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	4782 2882 5436 4782 2882 5458 Fedex: 4782 2882 5447	7/10/19	1800
		7/11/19	9:39

Version: 14Dec15

Custody seal #'s: 819082, 819083, 819084, 819085, 819086, 819087

350 580 140 DOL

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7/25/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-172966-1

Login Number: 172966
List Number: 1
Creator: Perez, Trina M

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	3.5°C, 5.8°C, 1.4°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-172966-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-172968-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/2/2019

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

Sample Identification	Sample Identification
TB-ROX-071019-8260-A	TB-ROX-071019-8011-A
MW3-ROX-071019	MW26-ROX-071019
MW12-ROX-071019	TB-ROX-071019-8260-B
TB-ROX-071019-8011-B	MW14-ROX-071019
P66-ROX-071019	MW28-ROX-071019
MW9-ROX-071019	MW9-ROX-071019-Dup

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated bis(2-ethylhexyl) phthalate was re-extracted outside of the extraction time criteria in sample MW14-ROX-071019. bis(2-Ethylhexyl) phthalate was detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCD recoveries were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in samples MW3-ROX-071019, MW12-ROX-071019, and in the SVOC LCSD. The MS/MSD recoveries and MS/MSD RPDs for 2-chloroethyl vinyl ether were outside evaluation criteria in samples MW26-ROX-071019 and MW28-ROX-071019, and the MS/MSD recoveries for 1,2-dibromo-3-chloropropane were outside evaluation criteria in sample MW26-ROX-071019. The PAH internal standard area recoveries for acenaphthene-d_{10} and chrysene-d_{12} were outside criteria in sample P66-ROX-071019, and the SVOC internal standard area recovery for perylene-d_{12} was outside criteria in the LCS. The difference in benzene results for the field duplicate pair MW9-ROX-071019/MW9-ROX-071019-Dup was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (J). Several PAHs in sample P66-ROX-071019 were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications for bis(2-chloroethyl) ether and dibenz[a,h]acridine were outside evaluation criteria, biased low; and the continuing calibration verifications for acenaphthene and fluorene were outside evaluation criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, bis(2-ethylhexyl) phthalate was re-extracted 12 days outside of the extraction time criteria (7 days) in sample MW14-ROX-071019, due to bis(2-ethylhexyl) phthalate results that were above the reporting limit in the method blank. Professional judgement was used to qualify as estimated (**UJ**); however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-071019	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 400-448199/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	13.6 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
MW3-ROX-071019	SVOCs	bis(2-Ethylhexyl) phthalate	-	**U**
P66-ROX-071019	SVOCs	bis(2-Ethylhexyl) phthalate	-	**U**
MW9-ROX-071019	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 400-448145/1002	VOCs	2-Hexanone	**140**	NA	65-137
LCS 400-448326/1002	VOCs	1,1,1,2-Tetrachloroethane	**136**	NA	67-131
LCS/LCSD 400-448199/2-A/3-A	SVOCs	Benzenethiol	**5/4**	24	10-120/30
LCS 400-448199/4-A	SVOCs	3,3'-Dichlorobenzidine	**138**	NA	39-135
LCS 400-448410/2-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**185**	NA	60-140

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-447641/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-071019	SVOCs	Benzenethiol	**UJ**
MW26-ROX-071019	SVOCs	Benzenethiol	**UJ**
MW12-ROX-071019	SVOCs	Benzenethiol	**UJ**
MW14-ROX-071019	SVOCs	Benzenethiol	**UJ**
P66-ROX-071019	SVOCs	Benzenethiol	**UJ**
MW28-ROX-071019	SVOCs	Benzenethiol	**UJ**
MW9-ROX-071019	SVOCs	Benzenethiol	**UJ**
MW9-ROX-071019-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW3-ROX-071019	SVOCs	Terphenyl-d_{14}	**46**	53-125
MW12-ROX-071019	SVOCs	2-Fluorophenol	**9**	10-120
LCSD 400-449866/3-A	SVOCs	Terphenyl-d_{14}	**51**	53-125

Qualifications due to surrogate recoveries were not required if only one of three base/neutral or acid fraction surrogate recoveries were outside evaluation criteria in the associated SVOC samples. LCSD 400-449866/3-A is a quality control sample and does not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW26-ROX-071019 was spiked and duplicated for Method 8260 VOCs, Method 8011 VOCs, and Method 8270 SVOCs/PAHs, and although not requested, MW28-ROX-071019 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
MW26-ROX-071019	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW28-ROX-071019	VOCs	2-Chloroethyl vinyl ether	**5/0**	**NC**	10-150/50
MW26-ROX-071019	VOCs by 8011	1,2-Dibromo-3-chloropropane	**178/189**	9	65-135/20

Analytical data that required qualification based on MS/MSD data are included in the table below. SVOC/PAH MS/MSD RPDs were outside criteria for sample MW26-ROX-071019; matrix preparatory volumes differed, however LCS/LCSD RPDs were within evaluation criteria. Analytical data associated with RPD alone outside evaluation criteria did not require qualification. Analytical data reported as non-detect and associated with MSMSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-071019	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW28-ROX-071019	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
LCSD 400-449866/3-A	SVOCs	Perylene-d_{12}	**1004621**	235719-942874
P66-ROX-071019	PAHs	Acenaphthene-d_{10}	**1284462**	261141-1044564
P66-ROX-071019	PAHs	Chrysene-d_{12}	**1000991**	241557-966226

LCSD 400-449866/3-A is a quality control sample and does not require qualification. There were no target analytes associated with acenaphthene-d_{10} and chrysene-d_{12} in the PAH original run; therefore, 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-071019	MW9-ROX-071019-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW9-ROX-071019	MW9-ROX-071019-Dup	VOCs	Benzene	**> 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.

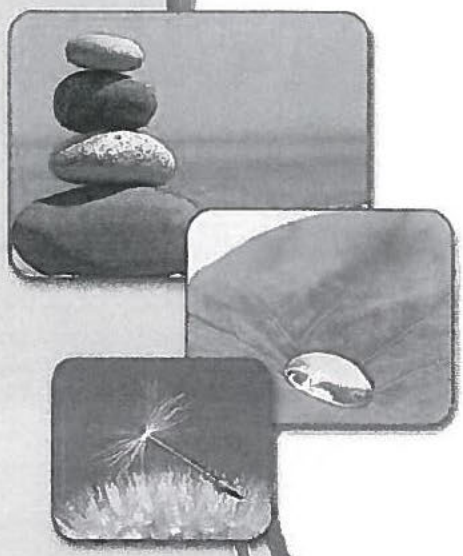
12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for bis(2-chloroethyl) ether and dibenz[a,h]acridine were outside acceptance criteria, biased low; the continuing calibration verifications for acenaphthene and fluorene were outside evaluation criteria, biased high. Data are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P66-ROX-071019	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW28-ROX-071019	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW9-ROX-071019	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW9-ROX-071019-Dup	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW3-ROX-071019	SVOCs	Dibenz[a,h]acridine	**UJ**
MW26-ROX-071019	SVOCs	Dibenz[a,h]acridine	**UJ**
MW12-ROX-071019	SVOCs	Dibenz[a,h]acridine	**UJ**
MW14-ROX-071019	SVOCs	Dibenz[a,h]acridine	**UJ**
P66-ROX-071019	PAHs	Acenaphthene	**J**
P66-ROX-071019	PAHs	Fluorene	**J**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-172968-1
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:
8/1/2019 3:34:10 PM

Leah Klingensmith, Senior Project Manager
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Reviewed 8/2/19 MK

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: 400-172968-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-172968-1

Comments
No additional comments.

Receipt
The samples were received on 7/11/2019 9:39 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.4° C, 3.5° C and 5.8° C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 400-448145 recovered outside control limits for the following analyte: 2-Hexanone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 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-071019-8260-A (400-172968-1), MW3-ROX-071019 (400-172968-3), MW12-ROX-071019 (400-172968-5), TB-ROX-071019-8260-B (400-172968-6), MW14-ROX-071019 (400-172968-8), P66-ROX-071019 (400-172968-9), MW28-ROX-071019 (400-172968-10), MW9-ROX-071019 (400-172968-11) and MW9-ROX-071019-DUP (400-172968-12). .The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, an acid-labile compound that degrades in an acidic medium.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-448145 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method(s) 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-448145 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 400-448326 recovered outside control limits for the following analyte: 1,1,1,2-Tetrachloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-448326 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method(s) 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-448326 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method(s) 8260B: The following samples are duplicates of each other, however the results do not match: MW9-ROX-071019 (400-172968-11) and MW9-ROX-071019-DUP (400-172968-12). Reanalysis was performed with concurring results.

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

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448709 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether. 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448709 recovered above the upper control limit for 4-Bromophenyl phenyl ether and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-448199 and analytical batch 400-448687 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.

Job ID: 400-172968-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 400-448199 and analytical batch 400-448687 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. The analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The method blank for preparation batch 400-448199 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). The samples associated with this method blank were either non-detect or less than the reporting limit; therefore, re-extraction and/or re-analysis of samples were not performed.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448687 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448687 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Chloro-3-methylphenol and Aniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448687 recovered outside acceptance criteria, low biased, for Dibenz[a,h]acridine. 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(s) 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: MW3-ROX-071019 (400-172968-3) and MW12-ROX-071019 (400-172968-5). These results have been reported and qualified.

Method(s) 8270D: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-448199 and analytical batch 400-448687 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(s) 8270D LL: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-448199 and analytical batch 400-448954 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(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-448954 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 400-448954/3).

Method(s) 8270D LL: The following sample was diluted to bring the concentration of target analytes within the calibration range: P66-ROX-071019 (400-172968-9). Elevated reporting limits (RLs) are provided.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-449887 recovered above the upper control limit for Acenaphthene, Benzo[g,h,i]perylene, Pyrene and Fluorene. The samples associated with this CCV were below reporting limit for the affected analytes; therefore, the data have been reported.

Method(s) 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: (LCSD 400-449866/3-A). These results have been reported and qualified.

Method(s) 8270D: Bis(2-ethylhexyl) phthalate was detected above the reporting limit (RL) in the method blank associated with 400-448199 as well as in the sample. All affected samples were re-extracted and/or re-analyzed outside of holding time. Both sets of data have been reported.

Job ID: 400-172968-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (CCVIS 400-448687/2). 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448449 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(s) 8011: The laboratory control sample (LCS) for preparation batch 400-448410 and analytical batch 400-448449 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(s) 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-448410 and analytical batch 400-448449 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448653 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448653 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-448449 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 following sample is impacted: (CCV 400-448449/2).

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: 400-172968-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-172968-1	TB-ROX-071019-8260-A	Water	07/10/19 00:00	07/11/19 09:39	
400-172968-2	TB-ROX-071019-8011-A	Water	07/10/19 00:00	07/11/19 09:39	
400-172968-3	MW3-ROX-071019	Water	07/10/19 09:05	07/11/19 09:39	
400-172968-4	MW26-ROX-071019	Water	07/10/19 10:35	07/11/19 09:39	
400-172968-5	MW12-ROX-071019	Water	07/10/19 12:10	07/11/19 09:39	
400-172968-6	TB-ROX-071019-8260-B	Water	07/10/19 00:00	07/11/19 09:39	
400-172968-7	TB-ROX-071019-8011-B	Water	07/10/19 00:00	07/11/19 09:39	
400-172968-8	MW14-ROX-071019	Water	07/10/19 08:30	07/11/19 09:39	
400-172968-9	P66-ROX-071019	Water	07/10/19 09:10	07/11/19 09:39	
400-172968-10	MW28-ROX-071019	Water	07/10/19 10:55	07/11/19 09:39	
400-172968-11	MW9-ROX-071019	Water	07/10/19 12:05	07/11/19 09:39	
400-172968-12	MW9-ROX-071019-DUP	Water	07/10/19 12:05	07/11/19 09:39	

Detection Summary

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8260-A — Lab Sample ID: 400-172968-1

No Detections.

Client Sample ID: TB-ROX-071019-8011-A — Lab Sample ID: 400-172968-2

No Detections.

Client Sample ID: MW3-ROX-071019 — Lab Sample ID: 400-172968-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		1.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	3.7		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	13		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	24		5.0	1.6	ug/L	1		8260B	Total/NA
N-Propylbenzene	36		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	2.2	J	5.0	0.60	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.0		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.95	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	14		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	26		10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	1.2		0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.62		0.20	0.020	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	~~7.5~~	J B U	10	5.1	ug/L	1		8270D	Total/NA
Indene	10		10	1.0	ug/L	1		8270D	Total/NA

Client Sample ID: MW26-ROX-071019 — Lab Sample ID: 400-172968-4

No Detections.

Client Sample ID: MW12-ROX-071019 — Lab Sample ID: 400-172968-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.050	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Benzo[k]fluoranthene	0.041	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.028	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene	0.042	J	0.20	0.040	ug/L	1		8270D LL	Total/NA

Client Sample ID: TB-ROX-071019-8260-B — Lab Sample ID: 400-172968-6

No Detections.

Client Sample ID: TB-ROX-071019-8011-B — Lab Sample ID: 400-172968-7

No Detections.

Client Sample ID: MW14-ROX-071019 — Lab Sample ID: 400-172968-8

Do not use this data. Use data that was reported from the 7/31/19 analysis.

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.048	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.059	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.040	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
* ~~Bis(2-ethylhexyl) phthalate~~	~~56~~	~~B~~	~~10~~	~~5.1~~	~~ug/L~~	~~1~~		~~8270D~~	~~Total/NA~~

Client Sample ID: P66-ROX-071019 — Lab Sample ID: 400-172968-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		1.0	0.38	ug/L	1		8260B	Total/NA
Chlorobenzene	0.54	J	1.0	0.50	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-172968-1

Client Sample ID: P66-ROX-071019 (Continued)

Lab Sample ID: 400-172968-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.1		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	48		1.0	0.53	ug/L	1		8260B	Total/NA
Naphthalene	120		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	78		1.0	0.69	ug/L	1		8260B	Total/NA
sec-Butylbenzene	4.6		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	3.8		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.61	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	2.9		1.0	0.82	ug/L	1		8260B	Total/NA
Benzo[a]pyrene	0.042	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Benzo[b]fluoranthene	0.045	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Benzo[g,h,i]perylene	0.041	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	26		0.20	0.020	ug/L	1		8270D LL	Total/NA
Acenaphthene - DL	0.81	J	1.0	0.10	ug/L	5		8270D LL	Total/NA
Fluorene - DL	0.49	J	1.0	0.11	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene - DL	55		1.0	0.10	ug/L	5		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	5.5	J B	10	5.0	ug/L	1		8270D	Total/NA
Indene	2.1	J	10	1.0	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	6.3	J	20	1.0	ug/L	1		8270D	Total/NA

Client Sample ID: MW28-ROX-071019

Lab Sample ID: 400-172968-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.8		1.0	0.74	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.038	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.026	J	0.20	0.020	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW9-ROX-071019

Lab Sample ID: 400-172968-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.7		1.0	0.38	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.025	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.026	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	6.3	J B	10	5.0	ug/L	1		8270D	Total/NA

Client Sample ID: MW9-ROX-071019-DUP

Lab Sample ID: 400-172968-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.65	J	1.0	0.38	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8260-A
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-1
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			07/16/19 12:30	1
Acrolein	ND		20	10	ug/L			07/16/19 12:30	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 12:30	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 12:30	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 12:30	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 12:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 12:30	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 12:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 12:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 12:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 12:30	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 12:30	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 12:30	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 12:30	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 12:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 12:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 12:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 12:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 12:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 12:30	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 12:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 12:30	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 12:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 12:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 12:30	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 12:30	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 12:30	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 12:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 12:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 12:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 12:30	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 12:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 12:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 12:30	1

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8260-A
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-1
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			07/16/19 12:30	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 12:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 12:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 12:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 12:30	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 12:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 12:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 12:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 12:30	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 12:30	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 12:30	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 12:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 12:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 12:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 12:30	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 12:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 12:30	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/16/19 12:30*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/16/19 12:30*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 12:30*	*1*

Client Sample Results

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8011-A

Lab Sample ID: 400-172968-2

Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

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		07/17/19 13:20	07/17/19 18:07	1
1,2-Dibromoethane	ND		0.021	0.0051	ug/L		07/17/19 13:20	07/17/19 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/17/19 13:20*	*07/17/19 18:07*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW3-ROX-071019
Date Collected: 07/10/19 09:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-3
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			07/16/19 09:51	1
Acrolein	ND		20	10	ug/L			07/16/19 09:51	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 09:51	1
Benzene	1.1		1.0	0.38	ug/L			07/16/19 09:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 09:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 09:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 09:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 09:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 09:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 09:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 09:51	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 09:51	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 09:51	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 09:51	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 09:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 09:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 09:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 09:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Ethylbenzene	3.7		1.0	0.50	ug/L			07/16/19 09:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 09:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 09:51	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 09:51	1
Isopropylbenzene	13		1.0	0.53	ug/L			07/16/19 09:51	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 09:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 09:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 09:51	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 09:51	1
m-Xylene & p-Xylene	24		5.0	1.6	ug/L			07/16/19 09:51	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 09:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 09:51	1
N-Propylbenzene	36		1.0	0.69	ug/L			07/16/19 09:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 09:51	1
o-Xylene	2.2	J	5.0	0.60	ug/L			07/16/19 09:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 09:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 09:51	1

Client Sample ID: MW3-ROX-071019
Date Collected: 07/10/19 09:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	1.0		1.0	0.70	ug/L			07/16/19 09:51	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 09:51	1
tert-Butylbenzene	0.95	J	1.0	0.63	ug/L			07/16/19 09:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 09:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 09:51	1
Toluene	14		1.0	0.41	ug/L			07/16/19 09:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 09:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 09:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 09:51	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 09:51	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 09:51	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 09:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 09:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 09:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 09:51	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 09:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 09:51	1
Xylenes, Total	26		10	1.6	ug/L			07/16/19 09:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*07/16/19 09:51*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*07/16/19 09:51*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/16/19 09:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
Benzo[a]anthracene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Benzo[g,h,i]perylene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Benzo[k]fluoranthene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Chrysene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Dibenz(a,h)anthracene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/22/19 14:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/22/19 14:29	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
1-Methylnaphthalene	1.2		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1
2-Methylnaphthalene	0.62		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*33 - 138*	*07/16/19 12:05*	*07/22/19 14:29*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*07/16/19 12:05*	*07/22/19 14:29*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW3-ROX-071019
Date Collected: 07/10/19 09:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67		19 - 130	07/16/19 12:05	07/22/19 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/16/19 12:05	07/19/19 16:54	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 16:54	1
Benzoic acid	ND		30	7.4	ug/L		07/16/19 12:05	07/19/19 16:54	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 16:54	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		07/16/19 12:05	07/19/19 16:54	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/16/19 12:05	07/19/19 16:54	1
Bis(2-ethylhexyl) phthalate	~~7.8~~	J B U	10	5.1	ug/L		07/16/19 12:05	07/19/19 16:54	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 16:54	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 16:54	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 16:54	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/16/19 12:05	07/19/19 16:54	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/16/19 12:05	07/19/19 16:54	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 16:54	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
Dibenz[a,h]acridine	ND	UJ	10	3.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
Dibenzofuran	ND		10	0.53	ug/L		07/16/19 12:05	07/19/19 16:54	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
Diethyl phthalate	ND		10	0.71	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 16:54	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/16/19 12:05	07/19/19 16:54	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 16:54	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 16:54	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		07/16/19 12:05	07/19/19 16:54	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 16:54	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 16:54	1
Hexachloroethane	ND		10	4.3	ug/L		07/16/19 12:05	07/19/19 16:54	1
Indene	10		10	1.0	ug/L		07/16/19 12:05	07/19/19 16:54	1
Isophorone	ND		10	0.58	ug/L		07/16/19 12:05	07/19/19 16:54	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 16:54	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/16/19 12:05	07/19/19 16:54	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 16:54	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 16:54	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 16:54	1
Nitrobenzene	ND		10	0.56	ug/L		07/16/19 12:05	07/19/19 16:54	1
2-Nitrophenol	ND		10	0.66	ug/L		07/16/19 12:05	07/19/19 16:54	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 16:54	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 16:54	1

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

Job ID: 400-172968-1

Client Sample ID: MW3-ROX-071019
Date Collected: 07/10/19 09:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 16:54	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		07/16/19 12:05	07/19/19 16:54	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 16:54	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 16:54	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 16:54	1
Quinoline	ND		10	6.1	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 16:54	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*07/16/19 12:05*	*07/19/19 16:54*	*1*
2-Fluorophenol	*26*		*10 - 120*	*07/16/19 12:05*	*07/19/19 16:54*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*07/16/19 12:05*	*07/19/19 16:54*	*1*
Phenol-d5	*52*		*10 - 120*	*07/16/19 12:05*	*07/19/19 16:54*	*1*
Terphenyl-d14	*46*	*X*	*53 - 125*	*07/16/19 12:05*	*07/19/19 16:54*	*1*
2,4,6-Tribromophenol	*64*		*15 - 135*	*07/16/19 12:05*	*07/19/19 16:54*	*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	*	0.031	0.0056	ug/L		07/17/19 13:20	07/17/19 18:30	1
1,2-Dibromoethane	ND		0.021	0.0051	ug/L		07/17/19 13:20	07/17/19 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/17/19 13:20*	*07/17/19 18:30*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW26-ROX-071019
Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-4
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			07/16/19 09:24	1
Acrolein	ND		20	10	ug/L			07/16/19 09:24	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 09:24	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 09:24	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 09:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 09:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 09:24	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 09:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 09:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 09:24	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/16/19 09:24	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 09:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 09:24	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 09:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 09:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 09:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 09:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 09:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 09:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 09:24	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 09:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 09:24	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 09:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 09:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 09:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 09:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 09:24	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 09:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 09:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 09:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 09:24	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 09:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 09:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 09:24	1

Client Sample ID: MW26-ROX-071019
Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-4
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			07/16/19 09:24	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 09:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 09:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 09:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 09:24	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 09:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 09:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 09:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 09:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 09:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 09:24	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 09:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 09:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 09:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 09:24	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 09:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 09:24	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*07/16/19 09:24*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/16/19 09:24*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 09:24*	*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	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
Acenaphthylene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
Anthracene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
Benzo[a]anthracene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Benzo[a]pyrene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Benzo[b]fluoranthene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Benzo[g,h,i]perylene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Benzo[k]fluoranthene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Chrysene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Dibenz(a,h)anthracene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Fluoranthene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
Fluorene	ND	F2	0.20	0.021	ug/L		07/16/19 12:05	07/22/19 14:48	1
Indeno[1,2,3-cd]pyrene	ND	F2	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 14:48	1
Phenanthrene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
Pyrene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
1-Methylnaphthalene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1
2-Methylnaphthalene	ND	F2	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*33 - 138*	*07/16/19 12:05*	*07/22/19 14:48*	*1*
2-Fluorobiphenyl	*94*		*15 - 122*	*07/16/19 12:05*	*07/22/19 14:48*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW26-ROX-071019
Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80		19 - 130	07/16/19 12:05	07/22/19 14:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F2	9.9	3.8	ug/L		07/16/19 12:05	07/19/19 15:50	1
Benzenethiol	ND	*	9.9	1.7	ug/L		07/16/19 12:05	07/19/19 15:50	1
Benzoic acid	ND	F2	30	7.3	ug/L		07/16/19 12:05	07/19/19 15:50	1
Benzyl alcohol	ND	F2	9.9	2.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
Bis(2-chloroethoxy)methane	ND	F2	9.9	0.69	ug/L		07/16/19 12:05	07/19/19 15:50	1
Bis(2-chloroethyl)ether	ND	F2	9.9	0.74	ug/L		07/16/19 12:05	07/19/19 15:50	1
bis (2-chloroisopropyl) ether	ND	F2	9.9	0.81	ug/L		07/16/19 12:05	07/19/19 15:50	1
Bis(2-ethylhexyl) phthalate	ND	F2	9.9	5.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
4-Bromophenyl phenyl ether	ND	F2	9.9	0.32	ug/L		07/16/19 12:05	07/19/19 15:50	1
Butyl benzyl phthalate	ND	F2	9.9	0.69	ug/L		07/16/19 12:05	07/19/19 15:50	1
4-Chloroaniline	ND	F2	9.9	3.4	ug/L		07/16/19 12:05	07/19/19 15:50	1
4-Chloro-3-methylphenol	ND	F2	9.9	3.8	ug/L		07/16/19 12:05	07/19/19 15:50	1
2-Chloronaphthalene	ND	F2	9.9	0.52	ug/L		07/16/19 12:05	07/19/19 15:50	1
2-Chlorophenol	ND	F2	9.9	2.2	ug/L		07/16/19 12:05	07/19/19 15:50	1
4-Chlorophenyl phenyl ether	ND	F2	9.9	2.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
Dibenz[a,h]acridine	ND	F2	9.9	3.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
Dibenzofuran	ND	F2	9.9	0.52	ug/L		07/16/19 12:05	07/19/19 15:50	1
3,3'-Dichlorobenzidine	ND	F2 *	9.9	2.6	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,4-Dichlorophenol	ND	F2	9.9	3.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
Diethyl phthalate	ND	F2	9.9	0.70	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,4-Dimethylphenol	ND	F2	9.9	3.5	ug/L		07/16/19 12:05	07/19/19 15:50	1
Dimethyl phthalate	ND	F2	9.9	0.60	ug/L		07/16/19 12:05	07/19/19 15:50	1
Di-n-butyl phthalate	ND	F2	9.9	2.7	ug/L		07/16/19 12:05	07/19/19 15:50	1
4,6-Dinitro-ortho-cresol	ND	F2	9.9	2.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,4-Dinitrophenol	ND	F2	30	3.4	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,4-Dinitrotoluene	ND	F2	9.9	1.9	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,6-Dinitrotoluene	ND	F2	9.9	1.9	ug/L		07/16/19 12:05	07/19/19 15:50	1
Di-n-octyl phthalate	ND	F2	9.9	0.44	ug/L		07/16/19 12:05	07/19/19 15:50	1
1,4-Dioxane	ND	F2	9.9	0.99	ug/L		07/16/19 12:05	07/19/19 15:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	9.9	0.99	ug/L		07/16/19 12:05	07/19/19 15:50	1
Hexachlorobenzene	ND	F2	9.9	0.25	ug/L		07/16/19 12:05	07/19/19 15:50	1
Hexachlorocyclopentadiene	ND	F2	20	2.6	ug/L		07/16/19 12:05	07/19/19 15:50	1
Hexachloroethane	ND	F2	9.9	4.2	ug/L		07/16/19 12:05	07/19/19 15:50	1
Indene	ND	F2	9.9	0.99	ug/L		07/16/19 12:05	07/19/19 15:50	1
Isophorone	ND	F2	9.9	0.57	ug/L		07/16/19 12:05	07/19/19 15:50	1
2-Methylphenol	ND	F2	9.9	1.8	ug/L		07/16/19 12:05	07/19/19 15:50	1
3 & 4 Methylphenol	ND	F2	20	1.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
2-Nitroaniline	ND	F2	9.9	2.2	ug/L		07/16/19 12:05	07/19/19 15:50	1
3-Nitroaniline	ND	F2	9.9	1.8	ug/L		07/16/19 12:05	07/19/19 15:50	1
4-Nitroaniline	ND	F2	9.9	2.5	ug/L		07/16/19 12:05	07/19/19 15:50	1
Nitrobenzene	ND	F2	9.9	0.55	ug/L		07/16/19 12:05	07/19/19 15:50	1
2-Nitrophenol	ND	F2	9.9	0.65	ug/L		07/16/19 12:05	07/19/19 15:50	1
4-Nitrophenol	ND	F2	9.9	2.1	ug/L		07/16/19 12:05	07/19/19 15:50	1
N-Nitrosodimethylamine	ND	F2	9.9	3.5	ug/L		07/16/19 12:05	07/19/19 15:50	1

Client Sample ID: MW26-ROX-071019

Lab Sample ID: 400-172968-4

Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND	F2	9.9	3.3	ug/L		07/16/19 12:05	07/19/19 15:50	1
N-Nitrosodiphenylamine	ND	F2	9.9	0.47	ug/L		07/16/19 12:05	07/19/19 15:50	1
Pentachlorophenol	ND	F2	20	1.8	ug/L		07/16/19 12:05	07/19/19 15:50	1
Phenol	ND	F2	9.9	2.6	ug/L		07/16/19 12:05	07/19/19 15:50	1
Pyridine	ND	F2	9.9	3.2	ug/L		07/16/19 12:05	07/19/19 15:50	1
Quinoline	ND	F2	9.9	6.0	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,4,5-Trichlorophenol	ND	F2	9.9	3.7	ug/L		07/16/19 12:05	07/19/19 15:50	1
2,4,6-Trichlorophenol	ND	F2	9.9	3.5	ug/L		07/16/19 12:05	07/19/19 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*34 - 120*	*07/16/19 12:05*	*07/19/19 15:50*	*1*
2-Fluorophenol	*25*		*10 - 120*	*07/16/19 12:05*	*07/19/19 15:50*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*07/16/19 12:05*	*07/19/19 15:50*	*1*
Phenol-d5	*47*		*10 - 120*	*07/16/19 12:05*	*07/19/19 15:50*	*1*
Terphenyl-d14	*57*		*53 - 125*	*07/16/19 12:05*	*07/19/19 15:50*	*1*
2,4,6-Tribromophenol	*50*		*15 - 135*	*07/16/19 12:05*	*07/19/19 15:50*	*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	F1 *	0.030	0.0055	ug/L		07/17/19 13:20	07/17/19 18:53	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/17/19 13:20	07/17/19 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*07/17/19 13:20*	*07/17/19 18:53*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW12-ROX-071019
Date Collected: 07/10/19 12:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-5
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			07/16/19 10:17	1
Acrolein	ND		20	10	ug/L			07/16/19 10:17	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 10:17	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 10:17	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 10:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 10:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 10:17	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 10:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 10:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 10:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 10:17	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 10:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 10:17	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 10:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 10:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 10:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 10:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 10:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 10:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 10:17	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 10:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 10:17	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 10:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 10:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 10:17	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 10:17	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 10:17	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 10:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 10:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 10:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 10:17	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 10:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 10:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 10:17	1

Client Sample ID: MW12-ROX-071019

Lab Sample ID: 400-172968-5

Date Collected: 07/10/19 12:10
Date Received: 07/11/19 09:39

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			07/16/19 10:17	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 10:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 10:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 10:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 10:17	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 10:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 10:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 10:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 10:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 10:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 10:17	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 10:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 10:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 10:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 10:17	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 10:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 10:17	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*07/16/19 10:17*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/16/19 10:17*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/16/19 10:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Benzo[b]fluoranthene	0.050	J	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Benzo[k]fluoranthene	0.041	J	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Chrysene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Fluoranthene	0.028	J	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/22/19 15:39	1
Indeno[1,2,3-cd]pyrene	0.042	J	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:39	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*129*		*33 - 138*	*07/16/19 12:05*	*07/22/19 15:39*	*1*
2-Fluorobiphenyl	*119*		*15 - 122*	*07/16/19 12:05*	*07/22/19 15:39*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW12-ROX-071019
Date Collected: 07/10/19 12:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	97		19 - 130	07/16/19 12:05	07/22/19 15:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 17:16	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 17:16	1
Benzoic acid	ND		30	7.3	ug/L		07/16/19 12:05	07/19/19 17:16	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 17:16	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/16/19 12:05	07/19/19 17:16	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/16/19 12:05	07/19/19 17:16	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 17:16	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 17:16	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 17:16	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 17:16	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 17:16	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 17:16	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
Dibenz[a,h]acridine	ND	UJ	10	3.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
Dibenzofuran	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 17:16	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
Diethyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 17:16	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/16/19 12:05	07/19/19 17:16	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 17:16	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 17:16	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 17:16	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 17:16	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 17:16	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 17:16	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
Isophorone	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 17:16	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 17:16	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 17:16	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 17:16	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 17:16	1
Nitrobenzene	ND		10	0.55	ug/L		07/16/19 12:05	07/19/19 17:16	1
2-Nitrophenol	ND		10	0.65	ug/L		07/16/19 12:05	07/19/19 17:16	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 17:16	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 17:16	1

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

Job ID: 400-172968-1

Client Sample ID: MW12-ROX-071019
Date Collected: 07/10/19 12:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 17:16	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 17:16	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 17:16	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 17:16	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 17:16	1
Quinoline	ND		10	6.0	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 17:16	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 120*	*07/16/19 12:05*	*07/19/19 17:16*	*1*
2-Fluorophenol	*9*	*X*	*10 - 120*	*07/16/19 12:05*	*07/19/19 17:16*	*1*
Nitrobenzene-d5	*98*		*27 - 120*	*07/16/19 12:05*	*07/19/19 17:16*	*1*
Phenol-d5	*16*		*10 - 120*	*07/16/19 12:05*	*07/19/19 17:16*	*1*
Terphenyl-d14	*79*		*53 - 125*	*07/16/19 12:05*	*07/19/19 17:16*	*1*
2,4,6-Tribromophenol	*26*		*15 - 135*	*07/16/19 12:05*	*07/19/19 17:16*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.029	0.0053	ug/L		07/17/19 13:20	07/17/19 20:26	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/17/19 13:20	07/17/19 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*07/17/19 13:20*	*07/17/19 20:26*	*1*

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8260-B
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-6
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			07/16/19 12:56	1
Acrolein	ND		20	10	ug/L			07/16/19 12:56	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 12:56	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 12:56	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 12:56	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 12:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 12:56	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 12:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 12:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 12:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 12:56	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 12:56	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 12:56	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 12:56	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 12:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 12:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 12:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 12:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 12:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 12:56	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 12:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 12:56	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 12:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 12:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 12:56	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 12:56	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 12:56	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 12:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 12:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 12:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 12:56	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 12:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 12:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 12:56	1

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8260-B
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-6
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			07/16/19 12:56	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 12:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 12:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 12:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 12:56	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 12:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 12:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 12:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 12:56	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 12:56	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 12:56	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 12:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 12:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 12:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 12:56	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 12:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 12:56	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/16/19 12:56*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/16/19 12:56*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 12:56*	*1*

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

Job ID: 400-172968-1

Client Sample ID: TB-ROX-071019-8011-B
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.030	0.0055	ug/L		07/17/19 13:20	07/17/19 20:49	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/17/19 13:20	07/17/19 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*07/17/19 13:20*	*07/17/19 20:49*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW14-ROX-071019
Date Collected: 07/10/19 08:30
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-8
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			07/16/19 10:44	1
Acrolein	ND		20	10	ug/L			07/16/19 10:44	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 10:44	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 10:44	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 10:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 10:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 10:44	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 10:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 10:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 10:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 10:44	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 10:44	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 10:44	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 10:44	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 10:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 10:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 10:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 10:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 10:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 10:44	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 10:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 10:44	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 10:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 10:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 10:44	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 10:44	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 10:44	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 10:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 10:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 10:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 10:44	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 10:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 10:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 10:44	1

Client Sample ID: MW14-ROX-071019

Lab Sample ID: 400-172968-8

Date Collected: 07/10/19 08:30
Date Received: 07/11/19 09:39

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			07/16/19 10:44	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 10:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 10:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 10:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 10:44	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 10:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 10:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 10:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 10:44	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 10:44	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 10:44	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 10:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 10:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 10:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 10:44	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 10:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 10:44	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*07/16/19 10:44*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/16/19 10:44*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 10:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.048	J	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Chrysene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/22/19 15:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 15:56	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
1-Methylnaphthalene	0.059	J	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1
2-Methylnaphthalene	0.040	J	0.20	0.020	ug/L		07/16/19 12:05	07/22/19 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*33 - 138*	*07/16/19 12:05*	*07/22/19 15:56*	*1*
2-Fluorobiphenyl	*95*		*15 - 122*	*07/16/19 12:05*	*07/22/19 15:56*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW14-ROX-071019
Date Collected: 07/10/19 08:30
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	85		19 - 130	07/16/19 12:05	07/22/19 15:56	1

Do not use this data. Use data that was reported from the 7/31/19 analysis.

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 17:37	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 17:37	1
Benzoic acid	ND		30	7.4	ug/L		07/16/19 12:05	07/19/19 17:37	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 17:37	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		07/16/19 12:05	07/19/19 17:37	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/16/19 12:05	07/19/19 17:37	1
* ~~Bis(2-ethylhexyl) phthalate~~	~~56~~	~~B~~	~~10~~	~~5.1~~	~~ug/L~~		~~07/16/19 12:05~~	~~07/19/19 17:37~~	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 17:37	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 17:37	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 17:37	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 17:37	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/16/19 12:05	07/19/19 17:37	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 17:37	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
Dibenz[a,h]acridine	ND	UJ	10	3.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
Dibenzofuran	ND		10	0.53	ug/L		07/16/19 12:05	07/19/19 17:37	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
Diethyl phthalate	ND		10	0.71	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 17:37	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/16/19 12:05	07/19/19 17:37	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 17:37	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 17:37	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 17:37	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 17:37	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 17:37	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 17:37	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 17:37	1
Isophorone	ND		10	0.58	ug/L		07/16/19 12:05	07/19/19 17:37	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 17:37	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/16/19 12:05	07/19/19 17:37	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 17:37	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 17:37	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 17:37	1
Nitrobenzene	ND		10	0.56	ug/L		07/16/19 12:05	07/19/19 17:37	1
2-Nitrophenol	ND		10	0.66	ug/L		07/16/19 12:05	07/19/19 17:37	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 17:37	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 17:37	1

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

Job ID: 400-172968-1

Client Sample ID: MW14-ROX-071019
Date Collected: 07/10/19 08:30
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-8
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		10	3.3	ug/L		07/16/19 12:05	07/19/19 17:37	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 17:37	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 17:37	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 17:37	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 17:37	1
Quinoline	ND		10	6.1	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 17:37	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*07/16/19 12:05*	*07/19/19 17:37*	*1*
2-Fluorophenol	*33*		*10 - 120*	*07/16/19 12:05*	*07/19/19 17:37*	*1*
Nitrobenzene-d5	*87*		*27 - 120*	*07/16/19 12:05*	*07/19/19 17:37*	*1*
Phenol-d5	*57*		*10 - 120*	*07/16/19 12:05*	*07/19/19 17:37*	*1*
Terphenyl-d14	*67*		*53 - 125*	*07/16/19 12:05*	*07/19/19 17:37*	*1*
2,4,6-Tribromophenol	*68*		*15 - 135*	*07/16/19 12:05*	*07/19/19 17:37*	*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 U5	9.9	5.0	ug/L		07/29/19 09:47	07/31/19 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*07/29/19 09:47*	*07/31/19 20:24*	*1*
2-Fluorophenol	*24*		*10 - 120*	*07/29/19 09:47*	*07/31/19 20:24*	*1*
Nitrobenzene-d5	*94*		*27 - 120*	*07/29/19 09:47*	*07/31/19 20:24*	*1*
Phenol-d5	*65*		*10 - 120*	*07/29/19 09:47*	*07/31/19 20:24*	*1*
Terphenyl-d14	*70*		*53 - 125*	*07/29/19 09:47*	*07/31/19 20:24*	*1*
2,4,6-Tribromophenol	*61*		*15 - 135*	*07/29/19 09:47*	*07/31/19 20:24*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*	0.031	0.0056	ug/L		07/17/19 13:20	07/17/19 21:11	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/17/19 13:20	07/17/19 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/17/19 13:20*	*07/17/19 21:11*	*1*

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

Job ID: 400-172968-1

Client Sample ID: P66-ROX-071019
Date Collected: 07/10/19 09:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-9
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			07/16/19 15:36	1
Acrolein	ND		20	10	ug/L			07/16/19 15:36	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 15:36	1
Benzene	1.7		1.0	0.38	ug/L			07/16/19 15:36	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 15:36	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 15:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 15:36	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 15:36	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 15:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Chlorobenzene	0.54	J	1.0	0.50	ug/L			07/16/19 15:36	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 15:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 15:36	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 15:36	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 15:36	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 15:36	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 15:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 15:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 15:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 15:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 15:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Ethylbenzene	1.1		1.0	0.50	ug/L			07/16/19 15:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 15:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 15:36	1
2-Hexanone	ND	*	25	3.1	ug/L			07/16/19 15:36	1
Isopropylbenzene	48		1.0	0.53	ug/L			07/16/19 15:36	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 15:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 15:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 15:36	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 15:36	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 15:36	1
Naphthalene	120		1.0	1.0	ug/L			07/16/19 15:36	1
n-Butylbenzene	1.8		1.0	0.76	ug/L			07/16/19 15:36	1
N-Propylbenzene	78		1.0	0.69	ug/L			07/16/19 15:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 15:36	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 15:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 15:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 15:36	1

Client Sample ID: P66-ROX-071019
Date Collected: 07/10/19 09:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	4.6		1.0	0.70	ug/L			07/16/19 15:36	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 15:36	1
tert-Butylbenzene	3.8		1.0	0.63	ug/L			07/16/19 15:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 15:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 15:36	1
Toluene	0.61	J	1.0	0.41	ug/L			07/16/19 15:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 15:36	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 15:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 15:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 15:36	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 15:36	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 15:36	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 15:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 15:36	1
1,2,4-Trimethylbenzene	2.9		1.0	0.82	ug/L			07/16/19 15:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 15:36	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 15:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 15:36	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*78 - 118*		*07/16/19 15:36*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/16/19 15:36*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/16/19 15:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 16:15	1
Benzo[a]pyrene	0.042	J	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 16:15	1
Benzo[b]fluoranthene	0.045	J	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 16:15	1
Benzo[g,h,i]perylene	0.041	J	0.20	0.040	ug/L		07/16/19 12:05	07/22/19 16:15	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 16:15	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 16:15	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 16:15	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/22/19 16:15	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 16:15	1
2-Methylnaphthalene	26		0.20	0.020	ug/L		07/16/19 12:05	07/22/19 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*86*		*19 - 130*	*07/16/19 12:05*	*07/22/19 16:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.81	J	1.0	0.10	ug/L		07/16/19 12:05	07/29/19 15:15	5
Acenaphthylene	ND		1.0	0.10	ug/L		07/16/19 12:05	07/29/19 15:15	5
Benzo[a]anthracene	ND		1.0	0.20	ug/L		07/16/19 12:05	07/29/19 15:15	5
Chrysene	ND		1.0	0.20	ug/L		07/16/19 12:05	07/29/19 15:15	5
Fluorene	0.49	J	1.0	0.11	ug/L		07/16/19 12:05	07/29/19 15:15	5

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

Job ID: 400-172968-1

Client Sample ID: P66-ROX-071019
Date Collected: 07/10/19 09:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		1.0	0.10	ug/L		07/16/19 12:05	07/29/19 15:15	5
1-Methylnaphthalene	55		1.0	0.10	ug/L		07/16/19 12:05	07/29/19 15:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*59*		*33 - 138*	*07/16/19 12:05*	*07/29/19 15:15*	*5*
2-Fluorobiphenyl	*62*		*15 - 122*	*07/16/19 12:05*	*07/29/19 15:15*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 18:53	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 18:53	1
Benzoic acid	ND		30	7.3	ug/L		07/16/19 12:05	07/19/19 18:53	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 18:53	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.74	ug/L		07/16/19 12:05	07/19/19 18:53	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/16/19 12:05	07/19/19 18:53	1
Bis(2-ethylhexyl) phthalate	~~5.5~~	J B U	10	5.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 18:53	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 18:53	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 18:53	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 18:53	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 18:53	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 18:53	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
Dibenzofuran	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 18:53	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
Diethyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 18:53	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/16/19 12:05	07/19/19 18:53	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 18:53	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 18:53	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 18:53	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 18:53	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 18:53	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 18:53	1
Indene	2.1	J	10	1.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
Isophorone	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 18:53	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 18:53	1
3 & 4 Methylphenol	6.3	J	20	1.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 18:53	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 18:53	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 18:53	1

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

Job ID: 400-172968-1

Client Sample ID: P66-ROX-071019
Date Collected: 07/10/19 09:10
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		10	0.55	ug/L		07/16/19 12:05	07/19/19 18:53	1
2-Nitrophenol	ND		10	0.65	ug/L		07/16/19 12:05	07/19/19 18:53	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 18:53	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 18:53	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 18:53	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 18:53	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 18:53	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 18:53	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 18:53	1
Quinoline	ND		10	6.0	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 18:53	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*07/16/19 12:05*	*07/19/19 18:53*	*1*
2-Fluorophenol	*51*		*10 - 120*	*07/16/19 12:05*	*07/19/19 18:53*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*07/16/19 12:05*	*07/19/19 18:53*	*1*
Phenol-d5	*54*		*10 - 120*	*07/16/19 12:05*	*07/19/19 18:53*	*1*
Terphenyl-d14	*58*		*53 - 125*	*07/16/19 12:05*	*07/19/19 18:53*	*1*
2,4,6-Tribromophenol	*91*		*15 - 135*	*07/16/19 12:05*	*07/19/19 18:53*	*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		07/17/19 13:20	07/17/19 21:34	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		07/17/19 13:20	07/17/19 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*07/17/19 13:20*	*07/17/19 21:34*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW28-ROX-071019
Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-10
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			07/17/19 10:46	1
Acrolein	ND		20	10	ug/L			07/17/19 10:46	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 10:46	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 10:46	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 10:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 10:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 10:46	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 10:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 10:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 10:46	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/17/19 10:46	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 10:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 10:46	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 10:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 10:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 10:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 10:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 10:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 10:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 10:46	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 10:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 10:46	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 10:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 10:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 10:46	1
Methyl tert-butyl ether	4.8		1.0	0.74	ug/L			07/17/19 10:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 10:46	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 10:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 10:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 10:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 10:46	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 10:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 10:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 10:46	1

Client Sample ID: MW28-ROX-071019
Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/19 10:46	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 10:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 10:46	1
1,1,1,2-Tetrachloroethane	ND	*	1.0	0.52	ug/L			07/17/19 10:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 10:46	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 10:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 10:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 10:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 10:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 10:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 10:46	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 10:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 10:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 10:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 10:46	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 10:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 10:46	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/17/19 10:46*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/17/19 10:46*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/17/19 10:46*	*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		07/16/19 12:05	07/29/19 15:34	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1
Benzo[a]anthracene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Benzo[g,h,i]perylene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Benzo[k]fluoranthene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Chrysene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Dibenz(a,h)anthracene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/29/19 15:34	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.041	ug/L		07/16/19 12:05	07/29/19 15:34	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1
1-Methylnaphthalene	0.038	J	0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1
2-Methylnaphthalene	0.026	J	0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*33 - 138*	*07/16/19 12:05*	*07/29/19 15:34*	*1*
2-Fluorobiphenyl	*69*		*15 - 122*	*07/16/19 12:05*	*07/29/19 15:34*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW28-ROX-071019
Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-10
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	60		19 - 130	07/16/19 12:05	07/29/19 15:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/16/19 12:05	07/19/19 19:14	1
Benzenethiol	ND	UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 19:14	1
Benzoic acid	ND		30	7.4	ug/L		07/16/19 12:05	07/19/19 19:14	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 19:14	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.75	ug/L		07/16/19 12:05	07/19/19 19:14	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/16/19 12:05	07/19/19 19:14	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/16/19 12:05	07/19/19 19:14	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 19:14	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 19:14	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 19:14	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/16/19 12:05	07/19/19 19:14	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/16/19 12:05	07/19/19 19:14	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 19:14	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
Dibenzofuran	ND		10	0.53	ug/L		07/16/19 12:05	07/19/19 19:14	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
Diethyl phthalate	ND		10	0.71	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:14	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/16/19 12:05	07/19/19 19:14	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 19:14	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 19:14	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		07/16/19 12:05	07/19/19 19:14	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 19:14	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 19:14	1
Hexachloroethane	ND		10	4.3	ug/L		07/16/19 12:05	07/19/19 19:14	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:14	1
Isophorone	ND		10	0.58	ug/L		07/16/19 12:05	07/19/19 19:14	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 19:14	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/16/19 12:05	07/19/19 19:14	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 19:14	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 19:14	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 19:14	1
Nitrobenzene	ND		10	0.56	ug/L		07/16/19 12:05	07/19/19 19:14	1
2-Nitrophenol	ND		10	0.66	ug/L		07/16/19 12:05	07/19/19 19:14	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 19:14	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:14	1

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

Job ID: 400-172968-1

Client Sample ID: MW28-ROX-071019
Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 19:14	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		07/16/19 12:05	07/19/19 19:14	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 19:14	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 19:14	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 19:14	1
Quinoline	ND		10	6.1	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 19:14	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*34 - 120*	*07/16/19 12:05*	*07/19/19 19:14*	*1*
2-Fluorophenol	*32*		*10 - 120*	*07/16/19 12:05*	*07/19/19 19:14*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*07/16/19 12:05*	*07/19/19 19:14*	*1*
Phenol-d5	*52*		*10 - 120*	*07/16/19 12:05*	*07/19/19 19:14*	*1*
Terphenyl-d14	*81*		*53 - 125*	*07/16/19 12:05*	*07/19/19 19:14*	*1*
2,4,6-Tribromophenol	*123*		*15 - 135*	*07/16/19 12:05*	*07/19/19 19:14*	*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		07/17/19 13:20	07/17/19 21:57	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/17/19 13:20	07/17/19 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*07/17/19 13:20*	*07/17/19 21:57*	*1*

Client Sample Results

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

Job ID: 400-172968-1

Client Sample ID: MW9-ROX-071019

Lab Sample ID: 400-172968-11

Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

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			07/17/19 13:44	1
Acrolein	ND		20	10	ug/L			07/17/19 13:44	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 13:44	1
Benzene	2.7	J	1.0	0.38	ug/L			07/17/19 13:44	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 13:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 13:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 13:44	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 13:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 13:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 13:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 13:44	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 13:44	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 13:44	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 13:44	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 13:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 13:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 13:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 13:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 13:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 13:44	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 13:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 13:44	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 13:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 13:44	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 13:44	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 13:44	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 13:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 13:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 13:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 13:44	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 13:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 13:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 13:44	1

Client Sample ID: MW9-ROX-071019
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-11
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			07/17/19 13:44	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 13:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 13:44	1
1,1,1,2-Tetrachloroethane	ND	*	1.0	0.52	ug/L			07/17/19 13:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 13:44	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 13:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 13:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 13:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 13:44	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 13:44	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 13:44	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 13:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 13:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 13:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 13:44	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 13:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 13:44	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*07/17/19 13:44*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/17/19 13:44*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/17/19 13:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Chrysene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/29/19 15:51	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 15:51	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
1-Methylnaphthalene	0.025	J	0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1
2-Methylnaphthalene	0.026	J	0.20	0.020	ug/L		07/16/19 12:05	07/29/19 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*114*		*33 - 138*	*07/16/19 12:05*	*07/29/19 15:51*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*07/16/19 12:05*	*07/29/19 15:51*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW9-ROX-071019
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*70*		*19 - 130*	*07/16/19 12:05*	*07/29/19 15:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 19:36	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 19:36	1
Benzoic acid	ND		30	7.3	ug/L		07/16/19 12:05	07/19/19 19:36	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 19:36	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.74	ug/L		07/16/19 12:05	07/19/19 19:36	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/16/19 12:05	07/19/19 19:36	1
Bis(2-ethylhexyl) phthalate	~~6.3~~	J B U	10	5.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 19:36	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 19:36	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 19:36	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 19:36	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 19:36	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 19:36	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
Dibenzofuran	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 19:36	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
Diethyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:36	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/16/19 12:05	07/19/19 19:36	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 19:36	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 19:36	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 19:36	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 19:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 19:36	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 19:36	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
Isophorone	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 19:36	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 19:36	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 19:36	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 19:36	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 19:36	1
Nitrobenzene	ND		10	0.55	ug/L		07/16/19 12:05	07/19/19 19:36	1
2-Nitrophenol	ND		10	0.65	ug/L		07/16/19 12:05	07/19/19 19:36	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 19:36	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:36	1

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

Job ID: 400-172968-1

Client Sample ID: MW9-ROX-071019
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 19:36	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 19:36	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 19:36	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 19:36	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 19:36	1
Quinoline	ND		10	6.0	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 19:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*34 - 120*	*07/16/19 12:05*	*07/19/19 19:36*	*1*
2-Fluorophenol	*34*		*10 - 120*	*07/16/19 12:05*	*07/19/19 19:36*	*1*
Nitrobenzene-d5	*75*		*27 - 120*	*07/16/19 12:05*	*07/19/19 19:36*	*1*
Phenol-d5	*54*		*10 - 120*	*07/16/19 12:05*	*07/19/19 19:36*	*1*
Terphenyl-d14	*99*		*53 - 125*	*07/16/19 12:05*	*07/19/19 19:36*	*1*
2,4,6-Tribromophenol	*122*		*15 - 135*	*07/16/19 12:05*	*07/19/19 19:36*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		07/18/19 12:20	07/19/19 03:47	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/18/19 12:20	07/19/19 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*07/18/19 12:20*	*07/19/19 03:47*	*1*

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

Job ID: 400-172968-1

Client Sample ID: MW9-ROX-071019-DUP
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-12
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			07/17/19 14:09	1
Acrolein	ND		20	10	ug/L			07/17/19 14:09	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 14:09	1
Benzene	0.65	J	1.0	0.38	ug/L			07/17/19 14:09	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 14:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 14:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 14:09	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 14:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 14:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 14:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 14:09	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 14:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 14:09	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 14:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 14:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 14:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 14:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 14:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 14:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 14:09	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 14:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 14:09	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 14:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 14:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 14:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 14:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 14:09	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 14:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 14:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 14:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 14:09	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 14:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 14:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 14:09	1

Client Sample ID: MW9-ROX-071019-DUP
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-12
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			07/17/19 14:09	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 14:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 14:09	1
1,1,1,2-Tetrachloroethane	ND	*	1.0	0.52	ug/L			07/17/19 14:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 14:09	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 14:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 14:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 14:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 14:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 14:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 14:09	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 14:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 14:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 14:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 14:09	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 14:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 14:09	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*07/17/19 14:09*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/17/19 14:09*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/17/19 14:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Chrysene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/29/19 16:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/29/19 16:08	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/29/19 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*106*		*33 - 138*	*07/16/19 12:05*	*07/29/19 16:08*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*07/16/19 12:05*	*07/29/19 16:08*	*1*

Client Sample ID: MW9-ROX-071019-DUP
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-12
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*64*		*19 - 130*	*07/16/19 12:05*	*07/29/19 16:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 19:57	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/16/19 12:05	07/19/19 19:57	1
Benzoic acid	ND		30	7.3	ug/L		07/16/19 12:05	07/19/19 19:57	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 19:57	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.74	ug/L		07/16/19 12:05	07/19/19 19:57	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/16/19 12:05	07/19/19 19:57	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 19:57	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 19:57	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 19:57	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 19:57	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 19:57	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 19:57	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
Dibenzofuran	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 19:57	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
Diethyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:57	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/16/19 12:05	07/19/19 19:57	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 19:57	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 19:57	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 19:57	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 19:57	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 19:57	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 19:57	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
Isophorone	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 19:57	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 19:57	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 19:57	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 19:57	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 19:57	1
Nitrobenzene	ND		10	0.55	ug/L		07/16/19 12:05	07/19/19 19:57	1
2-Nitrophenol	ND		10	0.65	ug/L		07/16/19 12:05	07/19/19 19:57	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 19:57	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:57	1

Client Sample ID: MW9-ROX-071019-DUP
Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

Lab Sample ID: 400-172968-12
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		10	3.3	ug/L		07/16/19 12:05	07/19/19 19:57	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 19:57	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 19:57	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 19:57	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 19:57	1
Quinoline	ND		10	6.0	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 19:57	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*34 - 120*	*07/16/19 12:05*	*07/19/19 19:57*	*1*
2-Fluorophenol	*37*		*10 - 120*	*07/16/19 12:05*	*07/19/19 19:57*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*07/16/19 12:05*	*07/19/19 19:57*	*1*
Phenol-d5	*54*		*10 - 120*	*07/16/19 12:05*	*07/19/19 19:57*	*1*
Terphenyl-d14	*116*		*53 - 125*	*07/16/19 12:05*	*07/19/19 19:57*	*1*
2,4,6-Tribromophenol	*115*		*15 - 135*	*07/16/19 12:05*	*07/19/19 19:57*	*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		07/18/19 12:20	07/19/19 04:09	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/18/19 12:20	07/19/19 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/18/19 12:20*	*07/19/19 04:09*	*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.
F2	MS/MSD RPD exceeds control limits
F4	MS/MSD RPD exceeds control limits due to sample size difference.
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.
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: 400-172968-1

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)
400-172968-1	TB-ROX-071019-8260-A	101	98	103
400-172968-3	MW3-ROX-071019	103	100	104
400-172968-4	MW26-ROX-071019	103	99	103
400-172968-4 MS	MW26-ROX-071019	100	98	100
400-172968-4 MSD	MW26-ROX-071019	100	98	103
400-172968-5	MW12-ROX-071019	102	99	102
400-172968-6	TB-ROX-071019-8260-B	101	99	103
400-172968-8	MW14-ROX-071019	103	99	103
400-172968-9	P66-ROX-071019	104	96	105
400-172968-10	MW28-ROX-071019	101	99	103
400-172968-10 MS	MW28-ROX-071019	97	99	100
400-172968-10 MSD	MW28-ROX-071019	99	99	102
400-172968-11	MW9-ROX-071019	101	99	104
400-172968-12	MW9-ROX-071019-DUP	100	98	101
LCS 400-448145/1002	Lab Control Sample	96	100	102
LCS 400-448326/1002	Lab Control Sample	98	98	101
MB 400-448145/4	Method Blank	102	99	103
MB 400-448326/4	Method Blank	99	100	102

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)
400-172968-3	MW3-ROX-071019	56	26	73	52	46 X	64
400-172968-4	MW26-ROX-071019	65	25	84	47	57	50
400-172968-4 MS	MW26-ROX-071019	64	30	88	58	66	65
400-172968-4 MSD	MW26-ROX-071019	66	40	92	63	66	68
400-172968-5	MW12-ROX-071019	77	9 X	98	16	79	26
400-172968-8	MW14-ROX-071019	68	33	87	57	67	68
400-172968-8 - RERA	MW14-ROX-071019	58	24	94	65	70	61
400-172968-9	P66-ROX-071019	56	51	76	54	58	91
400-172968-10	MW28-ROX-071019	82	32	65	52	81	123
400-172968-11	MW9-ROX-071019	86	34	75	54	99	122
400-172968-12	MW9-ROX-071019-DUP	90	37	65	54	116	115
LCS 400-448199/2-A	Lab Control Sample	67	38	91	68	84	47
LCS 400-448199/4-A	Lab Control Sample	68	62	97	76	82	78
LCS 400-449866/2-A	Lab Control Sample	49	30	86	58	60	61
LCSD 400-448199/3-A	Lab Control Sample Dup	68	34	91	68	86	45
LCSD 400-449866/3-A	Lab Control Sample Dup	44	20	80	50	51 X	53
MB 400-448199/1-A	Method Blank	73	39	96	71	92	65
MB 400-449866/1-A	Method Blank	41	28	72	47	56	38

Surrogate Legend

FBP = 2-Fluorobiphenyl

Surrogate Summary

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

Job ID: 400-172968-1

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)
400-172968-3	MW3-ROX-071019	67	73	67
400-172968-4	MW26-ROX-071019	98	94	80
400-172968-4 MS	MW26-ROX-071019	75	67	37
400-172968-4 MSD	MW26-ROX-071019	89	80	69
400-172968-5	MW12-ROX-071019	129	119	97
400-172968-8	MW14-ROX-071019	109	95	85
400-172968-9	P66-ROX-071019			86
400-172968-9 - DL	P66-ROX-071019	59	62	
400-172968-10	MW28-ROX-071019	93	69	60
400-172968-11	MW9-ROX-071019	114	76	70
400-172968-12	MW9-ROX-071019-DUP	106	77	64
LCS 400-448199/4-A	Lab Control Sample	99	88	88
MB 400-448199/1-A	Method Blank	89	72	70

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)
400-172968-2	TB-ROX-071019-8011-A	101
400-172968-3	MW3-ROX-071019	101
400-172968-4	MW26-ROX-071019	105
400-172968-4 MS	MW26-ROX-071019	101
400-172968-4 MSD	MW26-ROX-071019	105
400-172968-5	MW12-ROX-071019	115
400-172968-7	TB-ROX-071019-8011-B	109
400-172968-8	MW14-ROX-071019	106
400-172968-9	P66-ROX-071019	109
400-172968-10	MW28-ROX-071019	114
400-172968-11	MW9-ROX-071019	100
400-172968-12	MW9-ROX-071019-DUP	106
LCS 400-448410/2-A	Lab Control Sample	106
LCS 400-448551/2-A	Lab Control Sample	102
LCSD 400-448551/3-A	Lab Control Sample Dup	91
MB 400-448410/1-A	Method Blank	113
MB 400-448551/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-172968-1

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-071019-8260-A

Lab Sample ID: 400-172968-1
Matrix: Water
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 12:30	RS	TAL PEN

Client Sample ID: TB-ROX-071019-8011-A

Lab Sample ID: 400-172968-2
Matrix: Water
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 18:07	DS	TAL PEN

Client Sample ID: MW3-ROX-071019

Lab Sample ID: 400-172968-3
Matrix: Water
Date Collected: 07/10/19 09:05
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 09:51	RS	TAL PEN
Total/NA	Prep	3520C			986.6 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 16:54	VC1	TAL PEN
Total/NA	Prep	3520C			986.6 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448954	07/22/19 14:29	S1S	TAL PEN
Total/NA	Prep	8011			34.1 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 18:30	DS	TAL PEN

Client Sample ID: MW26-ROX-071019

Lab Sample ID: 400-172968-4
Matrix: Water
Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 09:24	RS	TAL PEN
Total/NA	Prep	3520C			1005.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 15:50	VC1	TAL PEN
Total/NA	Prep	3520C			1005.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448954	07/22/19 14:48	S1S	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 18:53	DS	TAL PEN

Client Sample ID: MW12-ROX-071019

Lab Sample ID: 400-172968-5
Matrix: Water
Date Collected: 07/10/19 12:10
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 10:17	RS	TAL PEN
Total/NA	Prep	3520C			1001.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 17:16	VC1	TAL PEN

Client Sample ID: MW12-ROX-071019

Lab Sample ID: 400-172968-5
Matrix: Water
Date Collected: 07/10/19 12:10
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1001.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448954	07/22/19 15:39	S1S	TAL PEN
Total/NA	Prep	8011			36.2 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 20:26	DS	TAL PEN

Client Sample ID: TB-ROX-071019-8260-B

Lab Sample ID: 400-172968-6
Matrix: Water
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 12:56	RS	TAL PEN

Client Sample ID: TB-ROX-071019-8011-B

Lab Sample ID: 400-172968-7
Matrix: Water
Date Collected: 07/10/19 00:00
Date Received: 07/11/19 09:39

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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 20:49	DS	TAL PEN

Client Sample ID: MW14-ROX-071019

Lab Sample ID: 400-172968-8
Matrix: Water
Date Collected: 07/10/19 08:30
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 10:44	RS	TAL PEN
Total/NA	Prep	3520C			989.6 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 17:37	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1008.4 mL	1 mL	449866	07/29/19 09:47	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450203	07/31/19 20:24	VC1	TAL PEN
Total/NA	Prep	3520C			989.6 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448954	07/22/19 15:56	S1S	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 21:11	DS	TAL PEN

Client Sample ID: P66-ROX-071019

Lab Sample ID: 400-172968-9
Matrix: Water
Date Collected: 07/10/19 09:10
Date Received: 07/11/19 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448145	07/16/19 15:36	RS	TAL PEN
Total/NA	Prep	3520C			994 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448709	07/19/19 18:53	VC1	TAL PEN
Total/NA	Prep	3520C			994 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448954	07/22/19 16:15	S1S	TAL PEN

Lab Chronicle

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

Job ID: 400-172968-1

Client Sample ID: P66-ROX-071019

Lab Sample ID: 400-172968-9

Date Collected: 07/10/19 09:10
Date Received: 07/11/19 09:39

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		994 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			449887	07/29/19 15:15	KJA	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 21:34	DS	TAL PEN

Client Sample ID: MW28-ROX-071019

Lab Sample ID: 400-172968-10

Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

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	448326	07/17/19 10:46	WPD	TAL PEN
Total/NA	Prep	3520C			986 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448709	07/19/19 19:14	VC1	TAL PEN
Total/NA	Prep	3520C			986 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			449887	07/29/19 15:34	KJA	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 21:57	DS	TAL PEN

Client Sample ID: MW9-ROX-071019

Lab Sample ID: 400-172968-11

Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

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	448326	07/17/19 13:44	WPD	TAL PEN
Total/NA	Prep	3520C			997.2 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448709	07/19/19 19:36	VC1	TAL PEN
Total/NA	Prep	3520C			997.2 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			449887	07/29/19 15:51	KJA	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	448551	07/18/19 12:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448653	07/19/19 03:47	S1K	TAL PEN

Client Sample ID: MW9-ROX-071019-DUP

Lab Sample ID: 400-172968-12

Date Collected: 07/10/19 12:05
Date Received: 07/11/19 09:39

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	448326	07/17/19 14:09	WPD	TAL PEN
Total/NA	Prep	3520C			998.6 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448709	07/19/19 19:57	VC1	TAL PEN
Total/NA	Prep	3520C			998.6 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			449887	07/29/19 16:08	KJA	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	448551	07/18/19 12:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448653	07/19/19 04:09	S1K	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448145/4

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	448145	07/16/19 08:58	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448199/1-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 13:42	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			448502	07/18/19 14:09	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448326/4

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	448326	07/17/19 09:04	WPD	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448410/1-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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 16:11	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448551/1-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	448551	07/18/19 12:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448653	07/18/19 20:34	S1K	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-449866/1-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	449866	07/29/19 09:47	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450203	07/31/19 17:55	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448145/1002**
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	448145	07/16/19 07:58	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448199/2-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 14:03	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448199/4-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 14:46	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			448502	07/18/19 14:25	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448326/1002**
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	448326	07/17/19 08:14	WPD	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448410/2-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	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 16:34	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448551/2-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	448551	07/18/19 12:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448653	07/18/19 20:57	S1K	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-449866/2-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	449866	07/29/19 09:47	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450203	07/31/19 18:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-448199/3-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	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 14:25	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-448551/3-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	448551	07/18/19 12:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448653	07/18/19 21:20	S1K	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-449866/3-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	449866	07/29/19 09:47	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450203	07/31/19 18:38	VC1	TAL PEN

Client Sample ID: MW26-ROX-071019 — **Lab Sample ID: 400-172968-4 MS**
Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39
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	448145	07/16/19 11:10	RS	TAL PEN
Total/NA	Prep	3520C			13907.4 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 15:07	VC1	TAL PEN
Total/NA	Prep	3520C			13907.4 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			448954	07/22/19 15:05	S1S	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 19:17	DS	TAL PEN

Client Sample ID: MW26-ROX-071019 — **Lab Sample ID: 400-172968-4 MSD**
Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39
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	448145	07/16/19 11:37	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-172968-1

Client Sample ID: MW26-ROX-071019

Lab Sample ID: 400-172968-4 MSD

Date Collected: 07/10/19 10:35
Date Received: 07/11/19 09:39

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			953.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D		1			448687	07/19/19 15:29	VC1	TAL PEN
Total/NA	Prep	3520C			953.8 mL	1.0 mL	448199	07/16/19 12:05	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			448954	07/22/19 15:22	S1S	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	448410	07/17/19 13:20	DS	TAL PEN
Total/NA	Analysis	8011		1			448449	07/17/19 19:40	DS	TAL PEN

Client Sample ID: MW28-ROX-071019

Lab Sample ID: 400-172968-10 MS

Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

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	448326	07/17/19 12:00	WPD	TAL PEN

Client Sample ID: MW28-ROX-071019

Lab Sample ID: 400-172968-10 MSD

Date Collected: 07/10/19 10:55
Date Received: 07/11/19 09:39

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	448326	07/17/19 12:26	WPD	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 448145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-1	TB-ROX-071019-8260-A	Total/NA	Water	8260B	
400-172968-3	MW3-ROX-071019	Total/NA	Water	8260B	
400-172968-4	MW26-ROX-071019	Total/NA	Water	8260B	
400-172968-5	MW12-ROX-071019	Total/NA	Water	8260B	
400-172968-6	TB-ROX-071019-8260-B	Total/NA	Water	8260B	
400-172968-8	MW14-ROX-071019	Total/NA	Water	8260B	
400-172968-9	P66-ROX-071019	Total/NA	Water	8260B	
MB 400-448145/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448145/1002	Lab Control Sample	Total/NA	Water	8260B	
400-172968-4 MS	MW26-ROX-071019	Total/NA	Water	8260B	
400-172968-4 MSD	MW26-ROX-071019	Total/NA	Water	8260B	

Analysis Batch: 448326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-10	MW28-ROX-071019	Total/NA	Water	8260B	
400-172968-11	MW9-ROX-071019	Total/NA	Water	8260B	
400-172968-12	MW9-ROX-071019-DUP	Total/NA	Water	8260B	
MB 400-448326/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448326/1002	Lab Control Sample	Total/NA	Water	8260B	
400-172968-10 MS	MW28-ROX-071019	Total/NA	Water	8260B	
400-172968-10 MSD	MW28-ROX-071019	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 448199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-3	MW3-ROX-071019	Total/NA	Water	3520C	
400-172968-4	MW26-ROX-071019	Total/NA	Water	3520C	
400-172968-5	MW12-ROX-071019	Total/NA	Water	3520C	
400-172968-8	MW14-ROX-071019	Total/NA	Water	3520C	
400-172968-9	P66-ROX-071019	Total/NA	Water	3520C	
400-172968-9 - DL	P66-ROX-071019	Total/NA	Water	3520C	
400-172968-10	MW28-ROX-071019	Total/NA	Water	3520C	
400-172968-11	MW9-ROX-071019	Total/NA	Water	3520C	
400-172968-12	MW9-ROX-071019-DUP	Total/NA	Water	3520C	
MB 400-448199/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-448199/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-448199/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-448199/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-172968-4 MS	MW26-ROX-071019	Total/NA	Water	3520C	
400-172968-4 MSD	MW26-ROX-071019	Total/NA	Water	3520C	

Analysis Batch: 448502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-448199/1-A	Method Blank	Total/NA	Water	8270D LL	448199
LCS 400-448199/4-A	Lab Control Sample	Total/NA	Water	8270D LL	448199

Analysis Batch: 448687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-3	MW3-ROX-071019	Total/NA	Water	8270D	448199
400-172968-4	MW26-ROX-071019	Total/NA	Water	8270D	448199

GC/MS Semi VOA (Continued)

Analysis Batch: 448687 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-5	MW12-ROX-071019	Total/NA	Water	8270D	448199
400-172968-8	MW14-ROX-071019	Total/NA	Water	8270D	448199
MB 400-448199/1-A	Method Blank	Total/NA	Water	8270D	448199
LCS 400-448199/2-A	Lab Control Sample	Total/NA	Water	8270D	448199
LCS 400-448199/4-A	Lab Control Sample	Total/NA	Water	8270D	448199
LCSD 400-448199/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	448199
400-172968-4 MS	MW26-ROX-071019	Total/NA	Water	8270D	448199
400-172968-4 MSD	MW26-ROX-071019	Total/NA	Water	8270D	448199

Analysis Batch: 448709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-9	P66-ROX-071019	Total/NA	Water	8270D	448199
400-172968-10	MW28-ROX-071019	Total/NA	Water	8270D	448199
400-172968-11	MW9-ROX-071019	Total/NA	Water	8270D	448199
400-172968-12	MW9-ROX-071019-DUP	Total/NA	Water	8270D	448199

Analysis Batch: 448954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-3	MW3-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-4	MW26-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-5	MW12-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-8	MW14-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-9	P66-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-4 MS	MW26-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-4 MSD	MW26-ROX-071019	Total/NA	Water	8270D LL	448199

Prep Batch: 449866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-8 - RERA	MW14-ROX-071019	Total/NA	Water	3520C	
MB 400-449866/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-449866/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-449866/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 449887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-9 - DL	P66-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-10	MW28-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-11	MW9-ROX-071019	Total/NA	Water	8270D LL	448199
400-172968-12	MW9-ROX-071019-DUP	Total/NA	Water	8270D LL	448199

Analysis Batch: 450203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-8 - RERA	MW14-ROX-071019	Total/NA	Water	8270D	449866
MB 400-449866/1-A	Method Blank	Total/NA	Water	8270D	449866
LCS 400-449866/2-A	Lab Control Sample	Total/NA	Water	8270D	449866
LCSD 400-449866/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	449866

QC Association Summary

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

Job ID: 400-172968-1

GC Semi VOA

Prep Batch: 448410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-2	TB-ROX-071019-8011-A	Total/NA	Water	8011	
400-172968-3	MW3-ROX-071019	Total/NA	Water	8011	
400-172968-4	MW26-ROX-071019	Total/NA	Water	8011	
400-172968-5	MW12-ROX-071019	Total/NA	Water	8011	
400-172968-7	TB-ROX-071019-8011-B	Total/NA	Water	8011	
400-172968-8	MW14-ROX-071019	Total/NA	Water	8011	
400-172968-9	P66-ROX-071019	Total/NA	Water	8011	
400-172968-10	MW28-ROX-071019	Total/NA	Water	8011	
MB 400-448410/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448410/2-A	Lab Control Sample	Total/NA	Water	8011	
400-172968-4 MS	MW26-ROX-071019	Total/NA	Water	8011	
400-172968-4 MSD	MW26-ROX-071019	Total/NA	Water	8011	

Analysis Batch: 448449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-2	TB-ROX-071019-8011-A	Total/NA	Water	8011	448410
400-172968-3	MW3-ROX-071019	Total/NA	Water	8011	448410
400-172968-4	MW26-ROX-071019	Total/NA	Water	8011	448410
400-172968-5	MW12-ROX-071019	Total/NA	Water	8011	448410
400-172968-7	TB-ROX-071019-8011-B	Total/NA	Water	8011	448410
400-172968-8	MW14-ROX-071019	Total/NA	Water	8011	448410
400-172968-9	P66-ROX-071019	Total/NA	Water	8011	448410
400-172968-10	MW28-ROX-071019	Total/NA	Water	8011	448410
MB 400-448410/1-A	Method Blank	Total/NA	Water	8011	448410
LCS 400-448410/2-A	Lab Control Sample	Total/NA	Water	8011	448410
400-172968-4 MS	MW26-ROX-071019	Total/NA	Water	8011	448410
400-172968-4 MSD	MW26-ROX-071019	Total/NA	Water	8011	448410

Prep Batch: 448551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-11	MW9-ROX-071019	Total/NA	Water	8011	
400-172968-12	MW9-ROX-071019-DUP	Total/NA	Water	8011	
MB 400-448551/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448551/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-448551/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 448653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-172968-11	MW9-ROX-071019	Total/NA	Water	8011	448551
400-172968-12	MW9-ROX-071019-DUP	Total/NA	Water	8011	448551
MB 400-448551/1-A	Method Blank	Total/NA	Water	8011	448551
LCS 400-448551/2-A	Lab Control Sample	Total/NA	Water	8011	448551
LCSD 400-448551/3-A	Lab Control Sample Dup	Total/NA	Water	8011	448551

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

Lab Sample ID: MB 400-448145/4
Matrix: Water
Analysis Batch: 448145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/19 08:58	1
Acrolein	ND		20	10	ug/L			07/16/19 08:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/19 08:58	1
Benzene	ND		1.0	0.38	ug/L			07/16/19 08:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/19 08:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/19 08:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Bromoform	ND		5.0	0.71	ug/L			07/16/19 08:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/19 08:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/19 08:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/19 08:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/19 08:58	1
Chloroform	ND		1.0	0.60	ug/L			07/16/19 08:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/19 08:58	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/19 08:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 08:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/19 08:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/19 08:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/19 08:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/19 08:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/19 08:58	1
2-Hexanone	ND		25	3.1	ug/L			07/16/19 08:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/19 08:58	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/19 08:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/19 08:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/19 08:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/19 08:58	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/19 08:58	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/19 08:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/19 08:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/19 08:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/19 08:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/19 08:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/19 08:58	1

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

Lab Sample ID: MB 400-448145/4
Matrix: Water
Analysis Batch: 448145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/19 08:58	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/19 08:58	1
Styrene	ND		1.0	1.0	ug/L			07/16/19 08:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/19 08:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/19 08:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/19 08:58	1
Toluene	ND		1.0	0.41	ug/L			07/16/19 08:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/19 08:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/19 08:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/19 08:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/19 08:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/19 08:58	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/19 08:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/19 08:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/19 08:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/19 08:58	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/19 08:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/19 08:58	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/19 08:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*07/16/19 08:58*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/16/19 08:58*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/16/19 08:58*	*1*

Lab Sample ID: LCS 400-448145/1002
Matrix: Water
Analysis Batch: 448145

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	293		ug/L		146	43 - 160
Acrolein	500	603		ug/L		121	38 - 160
Acrylonitrile	500	560		ug/L		112	64 - 142
Benzene	50.0	50.0		ug/L		100	70 - 130
Bromobenzene	50.0	49.2		ug/L		98	70 - 132
Bromochloromethane	50.0	51.7		ug/L		103	70 - 130
Bromodichloromethane	50.0	51.9		ug/L		104	67 - 133
Bromoform	50.0	57.9		ug/L		116	57 - 140
Bromomethane	50.0	36.4		ug/L		73	10 - 160
2-Butanone (MEK)	200	250		ug/L		125	61 - 145
Carbon disulfide	50.0	50.2		ug/L		100	61 - 137
Carbon tetrachloride	50.0	56.9		ug/L		114	61 - 137
Chlorobenzene	50.0	52.1		ug/L		104	70 - 130
Dibromochloromethane	50.0	57.6		ug/L		115	67 - 135
Chloroethane	50.0	45.7		ug/L		91	55 - 141

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

Lab Sample ID: LCS 400-448145/1002
Matrix: Water
Analysis Batch: 448145

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	39.5		ug/L		79	10 - 160
Chloroform	50.0	51.2		ug/L		102	69 - 130
1-Chlorohexane	50.0	56.6		ug/L		113	69 - 130
Chloromethane	50.0	41.6		ug/L		83	58 - 137
cis-1,2-Dichloroethene	50.0	53.4		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	54.8		ug/L		110	69 - 132
1,2-Dichlorobenzene	50.0	53.2		ug/L		106	67 - 130
1,3-Dichlorobenzene	50.0	52.7		ug/L		105	70 - 130
1,4-Dichlorobenzene	50.0	52.1		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	27.4		ug/L		55	41 - 146
1,1-Dichloroethane	50.0	53.5		ug/L		107	70 - 130
1,2-Dichloroethane	50.0	51.8		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	47.2		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	52.5		ug/L		105	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	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	53.5		ug/L		107	70 - 130
Ethyl methacrylate	50.0	59.3		ug/L		119	68 - 130
Hexachlorobutadiene	50.0	49.1		ug/L		98	53 - 140
2-Hexanone	200	280	*	ug/L		140	65 - 137
Isopropylbenzene	50.0	50.9		ug/L		102	70 - 130
Methylene bromide	50.0	46.8		ug/L		94	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	238		ug/L		119	69 - 138
Methyl tert-butyl ether	50.0	47.2		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	52.4		ug/L		105	70 - 130
Naphthalene	50.0	51.4		ug/L		103	47 - 149
n-Butylbenzene	50.0	53.1		ug/L		106	67 - 130
N-Propylbenzene	50.0	53.2		ug/L		106	70 - 130
o-Chlorotoluene	50.0	52.0		ug/L		104	70 - 130
o-Xylene	50.0	52.0		ug/L		104	70 - 130
p-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
p-Isopropyltoluene	50.0	52.8		ug/L		106	65 - 130
sec-Butylbenzene	50.0	51.0		ug/L		102	66 - 130
Styrene	50.0	49.8		ug/L		100	70 - 130
tert-Butylbenzene	50.0	50.8		ug/L		102	64 - 139
1,1,1,2-Tetrachloroethane	50.0	63.2		ug/L		126	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	70 - 131
Tetrachloroethene	50.0	52.2		ug/L		104	65 - 130
Toluene	50.0	53.5		ug/L		107	70 - 130
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	59.9		ug/L		120	63 - 130
1,2,3-Trichlorobenzene	50.0	50.4		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 140
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	52.8		ug/L		106	70 - 130
Trichloroethene	50.0	50.7		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	40.5		ug/L		81	65 - 138

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

Lab Sample ID: LCS 400-448145/1002
Matrix: Water
Analysis Batch: 448145

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	49.0		ug/L		98	70 - 130
1,2,4-Trimethylbenzene	50.0	50.6		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	50.0	50.4		ug/L		101	69 - 130
Vinyl acetate	100	104		ug/L		104	26 - 160
Vinyl chloride	50.0	41.8		ug/L		84	59 - 136
Xylenes, Total	100	104		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*100*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 400-172968-4 MS
Matrix: Water
Analysis Batch: 448145

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	107		ug/L		53	43 - 150
Acrolein	ND		500	586		ug/L		117	38 - 150
Acrylonitrile	ND		500	555		ug/L		111	62 - 149
Benzene	ND		50.0	52.6		ug/L		105	56 - 142
Bromobenzene	ND		50.0	51.7		ug/L		103	59 - 136
Bromochloromethane	ND		50.0	54.1		ug/L		108	64 - 140
Bromodichloromethane	ND		50.0	52.9		ug/L		106	59 - 143
Bromoform	ND		50.0	59.9		ug/L		120	50 - 140
Bromomethane	ND		50.0	39.5		ug/L		79	10 - 150
2-Butanone (MEK)	ND		200	136		ug/L		68	55 - 150
Carbon disulfide	ND		50.0	51.7		ug/L		103	48 - 150
Carbon tetrachloride	ND		50.0	58.1		ug/L		116	55 - 145
Chlorobenzene	ND		50.0	52.3		ug/L		105	64 - 130
Dibromochloromethane	ND		50.0	57.4		ug/L		115	56 - 143
Chloroethane	ND		50.0	48.2		ug/L		96	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	53.1		ug/L		106	60 - 141
1-Chlorohexane	ND		50.0	56.0		ug/L		112	56 - 136
Chloromethane	ND		50.0	42.9		ug/L		86	49 - 148
cis-1,2-Dichloroethene	ND		50.0	55.5		ug/L		111	59 - 143
cis-1,3-Dichloropropene	ND		50.0	54.1		ug/L		108	57 - 140
1,2-Dichlorobenzene	ND		50.0	54.0		ug/L		108	52 - 137
1,3-Dichlorobenzene	ND		50.0	54.0		ug/L		108	54 - 135
1,4-Dichlorobenzene	ND		50.0	53.5		ug/L		107	53 - 135
Dichlorodifluoromethane	ND		50.0	27.7		ug/L		55	16 - 150
1,1-Dichloroethane	ND		50.0	55.8		ug/L		112	61 - 144
1,2-Dichloroethane	ND		50.0	53.4		ug/L		107	60 - 141
1,1-Dichloroethene	ND		50.0	49.2		ug/L		98	54 - 147
1,2-Dichloropropane	ND		50.0	55.3		ug/L		111	66 - 137
1,3-Dichloropropane	ND		50.0	54.3		ug/L		109	66 - 133
2,2-Dichloropropane	ND		50.0	53.2		ug/L		106	42 - 144

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

Lab Sample ID: 400-172968-4 MS
Matrix: Water
Analysis Batch: 448145

Client Sample ID: MW26-ROX-071019
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	52.6		ug/L		105	65 - 136
Ethylbenzene	ND		50.0	53.8		ug/L		108	58 - 131
Ethyl methacrylate	ND		50.0	58.4		ug/L		117	64 - 130
Hexachlorobutadiene	ND		50.0	46.9		ug/L		94	31 - 149
2-Hexanone	ND	*	200	176		ug/L		88	65 - 140
Isopropylbenzene	ND		50.0	51.3		ug/L		103	56 - 133
Methylene bromide	ND		50.0	48.1		ug/L		96	63 - 138
Methylene Chloride	ND		50.0	51.4		ug/L		103	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	219		ug/L		109	63 - 146
Methyl tert-butyl ether	ND		50.0	47.8		ug/L		96	59 - 137
m-Xylene & p-Xylene	ND		50.0	53.0		ug/L		106	57 - 130
Naphthalene	ND		50.0	48.4		ug/L		97	25 - 150
n-Butylbenzene	ND		50.0	53.5		ug/L		107	41 - 142
N-Propylbenzene	ND		50.0	55.1		ug/L		110	51 - 138
o-Chlorotoluene	ND		50.0	54.1		ug/L		108	53 - 134
o-Xylene	ND		50.0	52.7		ug/L		105	61 - 130
p-Chlorotoluene	ND		50.0	53.9		ug/L		108	54 - 133
p-Isopropyltoluene	ND		50.0	53.9		ug/L		108	48 - 139
sec-Butylbenzene	ND		50.0	53.0		ug/L		106	50 - 138
Styrene	ND		50.0	49.6		ug/L		99	58 - 131
tert-Butylbenzene	ND		50.0	52.8		ug/L		106	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	62.4		ug/L		125	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	54.9		ug/L		110	66 - 135
Tetrachloroethene	ND		50.0	51.9		ug/L		104	52 - 133
Toluene	ND		50.0	53.2		ug/L		106	65 - 130
trans-1,2-Dichloroethene	ND		50.0	52.3		ug/L		105	61 - 143
trans-1,3-Dichloropropene	ND		50.0	59.2		ug/L		118	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	46.9		ug/L		94	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	46.5		ug/L		93	39 - 148
1,1,1-Trichloroethane	ND		50.0	53.0		ug/L		106	57 - 142
1,1,2-Trichloroethane	ND		50.0	55.1		ug/L		110	66 - 131
Trichloroethene	ND		50.0	51.4		ug/L		103	64 - 136
Trichlorofluoromethane	ND		50.0	41.4		ug/L		83	54 - 150
1,2,3-Trichloropropane	ND		50.0	52.6		ug/L		105	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	52.3		ug/L		105	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	53.1		ug/L		106	52 - 135
Vinyl acetate	ND		100	105		ug/L		105	26 - 150
Vinyl chloride	ND		50.0	43.1		ug/L		86	46 - 150
Xylenes, Total	ND		100	106		ug/L		106	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*100*		*80 - 120*

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

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448145

Client Sample ID: MW26-ROX-071019
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	103		ug/L		51	43 - 150	4	30
Acrolein	ND		500	562		ug/L		112	38 - 150	4	31
Acrylonitrile	ND		500	548		ug/L		110	62 - 149	1	30
Benzene	ND		50.0	51.6		ug/L		103	56 - 142	2	30
Bromobenzene	ND		50.0	51.7		ug/L		103	59 - 136	0	30
Bromochloromethane	ND		50.0	51.6		ug/L		103	64 - 140	5	30
Bromodichloromethane	ND		50.0	51.9		ug/L		104	59 - 143	2	30
Bromoform	ND		50.0	57.6		ug/L		115	50 - 140	4	30
Bromomethane	ND		50.0	37.7		ug/L		75	10 - 150	5	50
2-Butanone (MEK)	ND		200	139		ug/L		69	55 - 150	2	30
Carbon disulfide	ND		50.0	51.4		ug/L		103	48 - 150	1	30
Carbon tetrachloride	ND		50.0	57.7		ug/L		115	55 - 145	1	30
Chlorobenzene	ND		50.0	53.1		ug/L		106	64 - 130	1	30
Dibromochloromethane	ND		50.0	57.2		ug/L		114	56 - 143	0	30
Chloroethane	ND		50.0	44.8		ug/L		90	50 - 150	7	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	52.0		ug/L		104	60 - 141	2	30
1-Chlorohexane	ND		50.0	57.2		ug/L		114	56 - 136	2	30
Chloromethane	ND		50.0	42.0		ug/L		84	49 - 148	2	31
cis-1,2-Dichloroethene	ND		50.0	54.1		ug/L		108	59 - 143	2	30
cis-1,3-Dichloropropene	ND		50.0	54.8		ug/L		110	57 - 140	1	30
1,2-Dichlorobenzene	ND		50.0	53.8		ug/L		108	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	53.1		ug/L		106	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	52.3		ug/L		105	53 - 135	2	30
Dichlorodifluoromethane	ND		50.0	26.3		ug/L		53	16 - 150	5	31
1,1-Dichloroethane	ND		50.0	55.8		ug/L		112	61 - 144	0	30
1,2-Dichloroethane	ND		50.0	51.8		ug/L		104	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	48.8		ug/L		98	54 - 147	1	30
1,2-Dichloropropane	ND		50.0	54.6		ug/L		109	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	53.9		ug/L		108	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	54.1		ug/L		108	42 - 144	2	31
1,1-Dichloropropene	ND		50.0	52.4		ug/L		105	65 - 136	0	30
Ethylbenzene	ND		50.0	54.3		ug/L		109	58 - 131	1	30
Ethyl methacrylate	ND		50.0	58.4		ug/L		117	64 - 130	0	30
Hexachlorobutadiene	ND		50.0	47.0		ug/L		94	31 - 149	0	36
2-Hexanone	ND	*	200	172		ug/L		86	65 - 140	2	30
Isopropylbenzene	ND		50.0	51.6		ug/L		103	56 - 133	1	30
Methylene bromide	ND		50.0	47.3		ug/L		95	63 - 138	2	30
Methylene Chloride	ND		50.0	51.2		ug/L		102	60 - 146	0	32
4-Methyl-2-pentanone (MIBK)	ND		200	213		ug/L		107	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	47.3		ug/L		95	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	53.2		ug/L		106	57 - 130	0	30
Naphthalene	ND		50.0	48.7		ug/L		97	25 - 150	1	30
n-Butylbenzene	ND		50.0	52.9		ug/L		106	41 - 142	1	31
N-Propylbenzene	ND		50.0	55.1		ug/L		110	51 - 138	0	30
o-Chlorotoluene	ND		50.0	53.1		ug/L		106	53 - 134	2	30
o-Xylene	ND		50.0	52.9		ug/L		106	61 - 130	0	30
p-Chlorotoluene	ND		50.0	53.3		ug/L		107	54 - 133	1	30

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

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448145

Client Sample ID: MW26-ROX-071019
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	53.7		ug/L		107	48 - 139	0	30
sec-Butylbenzene	ND		50.0	52.5		ug/L		105	50 - 138	1	30
Styrene	ND		50.0	49.8		ug/L		100	58 - 131	0	30
tert-Butylbenzene	ND		50.0	52.4		ug/L		105	54 - 146	1	30
1,1,1,2-Tetrachloroethane	ND		50.0	63.4		ug/L		127	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	54.4		ug/L		109	66 - 135	1	30
Tetrachloroethene	ND		50.0	51.8		ug/L		104	52 - 133	0	30
Toluene	ND		50.0	54.0		ug/L		108	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	52.6		ug/L		105	61 - 143	0	30
trans-1,3-Dichloropropene	ND		50.0	59.5		ug/L		119	53 - 133	0	30
1,2,3-Trichlorobenzene	ND		50.0	47.8		ug/L		96	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	46.1		ug/L		92	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	52.6		ug/L		105	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	54.1		ug/L		108	66 - 131	2	30
Trichloroethene	ND		50.0	51.0		ug/L		102	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	39.2		ug/L		78	54 - 150	6	30
1,2,3-Trichloropropane	ND		50.0	50.4		ug/L		101	65 - 133	4	30
1,2,4-Trimethylbenzene	ND		50.0	51.3		ug/L		103	50 - 139	2	30
1,3,5-Trimethylbenzene	ND		50.0	52.5		ug/L		105	52 - 135	1	30
Vinyl acetate	ND		100	98.9		ug/L		99	26 - 150	6	33
Vinyl chloride	ND		50.0	42.2		ug/L		84	46 - 150	2	30
Xylenes, Total	ND		100	106		ug/L		106	59 - 130	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 400-448326/4
Matrix: Water
Analysis Batch: 448326

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/17/19 09:04	1
Acrolein	ND		20	10	ug/L			07/17/19 09:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 09:04	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 09:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 09:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 09:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 09:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 09:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 09:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 09:04	1

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

Lab Sample ID: MB 400-448326/4
Matrix: Water
Analysis Batch: 448326

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			07/17/19 09:04	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 09:04	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 09:04	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 09:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 09:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 09:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 09:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 09:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 09:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 09:04	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 09:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 09:04	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 09:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 09:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 09:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 09:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 09:04	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 09:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 09:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 09:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 09:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 09:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 09:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 09:04	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/19 09:04	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 09:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 09:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 09:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 09:04	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 09:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 09:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 09:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 09:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 09:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 09:04	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 09:04	1

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

Lab Sample ID: MB 400-448326/4
Matrix: Water
Analysis Batch: 448326

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 09:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 09:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 09:04	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 09:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 09:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 09:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*07/17/19 09:04*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*07/17/19 09:04*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/17/19 09:04*	*1*

Lab Sample ID: LCS 400-448326/1002
Matrix: Water
Analysis Batch: 448326

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	255		ug/L		127	43 - 160
Acrolein	500	569		ug/L		114	38 - 160
Acrylonitrile	500	548		ug/L		110	64 - 142
Benzene	50.0	55.2		ug/L		110	70 - 130
Bromobenzene	50.0	54.7		ug/L		109	70 - 132
Bromochloromethane	50.0	56.3		ug/L		113	70 - 130
Bromodichloromethane	50.0	56.0		ug/L		112	67 - 133
Bromoform	50.0	59.8		ug/L		120	57 - 140
Bromomethane	50.0	39.8		ug/L		80	10 - 160
2-Butanone (MEK)	200	224		ug/L		112	61 - 145
Carbon disulfide	50.0	54.9		ug/L		110	61 - 137
Carbon tetrachloride	50.0	62.8		ug/L		126	61 - 137
Chlorobenzene	50.0	56.8		ug/L		114	70 - 130
Dibromochloromethane	50.0	60.2		ug/L		120	67 - 135
Chloroethane	50.0	48.1		ug/L		96	55 - 141
2-Chloroethyl vinyl ether	50.0	44.2		ug/L		88	10 - 160
Chloroform	50.0	56.2		ug/L		112	69 - 130
1-Chlorohexane	50.0	60.7		ug/L		121	69 - 130
Chloromethane	50.0	44.0		ug/L		88	58 - 137
cis-1,2-Dichloroethene	50.0	58.1		ug/L		116	68 - 130
cis-1,3-Dichloropropene	50.0	58.8		ug/L		118	69 - 132
1,2-Dichlorobenzene	50.0	58.1		ug/L		116	67 - 130
1,3-Dichlorobenzene	50.0	58.2		ug/L		116	70 - 130
1,4-Dichlorobenzene	50.0	57.9		ug/L		116	70 - 130
Dichlorodifluoromethane	50.0	27.7		ug/L		55	41 - 146
1,1-Dichloroethane	50.0	59.1		ug/L		118	70 - 130
1,2-Dichloroethane	50.0	55.3		ug/L		111	69 - 130
1,1-Dichloroethene	50.0	51.6		ug/L		103	63 - 134
1,2-Dichloropropane	50.0	58.7		ug/L		117	70 - 130
1,3-Dichloropropane	50.0	55.8		ug/L		112	70 - 130
2,2-Dichloropropane	50.0	57.9		ug/L		116	52 - 135

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

Lab Sample ID: LCS 400-448326/1002
Matrix: Water
Analysis Batch: 448326

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	56.3		ug/L		113	70 - 130
Ethylbenzene	50.0	58.1		ug/L		116	70 - 130
Ethyl methacrylate	50.0	58.6		ug/L		117	68 - 130
Hexachlorobutadiene	50.0	51.6		ug/L		103	53 - 140
2-Hexanone	200	262		ug/L		131	65 - 137
Isopropylbenzene	50.0	55.5		ug/L		111	70 - 130
Methylene bromide	50.0	49.9		ug/L		100	70 - 130
Methylene Chloride	50.0	54.3		ug/L		109	66 - 135
4-Methyl-2-pentanone (MIBK)	200	229		ug/L		114	69 - 138
Methyl tert-butyl ether	50.0	49.2		ug/L		98	66 - 130
m-Xylene & p-Xylene	50.0	57.4		ug/L		115	70 - 130
Naphthalene	50.0	49.8		ug/L		100	47 - 149
n-Butylbenzene	50.0	57.9		ug/L		116	67 - 130
N-Propylbenzene	50.0	59.2		ug/L		118	70 - 130
o-Chlorotoluene	50.0	58.2		ug/L		116	70 - 130
o-Xylene	50.0	57.0		ug/L		114	70 - 130
p-Chlorotoluene	50.0	58.2		ug/L		116	70 - 130
p-Isopropyltoluene	50.0	58.0		ug/L		116	65 - 130
sec-Butylbenzene	50.0	56.5		ug/L		113	66 - 130
Styrene	50.0	54.0		ug/L		108	70 - 130
tert-Butylbenzene	50.0	56.2		ug/L		112	64 - 139
1,1,1,2-Tetrachloroethane	50.0	67.9	*	ug/L		136	67 - 131
1,1,2,2-Tetrachloroethane	50.0	54.9		ug/L		110	70 - 131
Tetrachloroethene	50.0	56.6		ug/L		113	65 - 130
Toluene	50.0	57.1		ug/L		114	70 - 130
trans-1,2-Dichloroethene	50.0	55.7		ug/L		111	70 - 130
trans-1,3-Dichloropropene	50.0	62.9		ug/L		126	63 - 130
1,2,3-Trichlorobenzene	50.0	51.8		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	51.7		ug/L		103	60 - 140
1,1,1-Trichloroethane	50.0	57.1		ug/L		114	68 - 130
1,1,2-Trichloroethane	50.0	55.3		ug/L		111	70 - 130
Trichloroethene	50.0	55.9		ug/L		112	70 - 130
Trichlorofluoromethane	50.0	42.3		ug/L		85	65 - 138
1,2,3-Trichloropropane	50.0	51.0		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	50.0	55.9		ug/L		112	70 - 130
1,3,5-Trimethylbenzene	50.0	56.8		ug/L		114	69 - 130
Vinyl acetate	100	101		ug/L		101	26 - 160
Vinyl chloride	50.0	44.1		ug/L		88	59 - 136
Xylenes, Total	100	114		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 400-172968-10 MS
Matrix: Water
Analysis Batch: 448326

Client Sample ID: MW28-ROX-071019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	101		ug/L		51	43 - 150
Acrolein	ND		500	571		ug/L		114	38 - 150
Acrylonitrile	ND		500	514		ug/L		103	62 - 149
Benzene	ND		50.0	50.1		ug/L		100	56 - 142
Bromobenzene	ND		50.0	47.6		ug/L		95	59 - 136
Bromochloromethane	ND		50.0	51.2		ug/L		102	64 - 140
Bromodichloromethane	ND		50.0	49.8		ug/L		100	59 - 143
Bromoform	ND		50.0	52.8		ug/L		106	50 - 140
Bromomethane	ND		50.0	38.1		ug/L		76	10 - 150
2-Butanone (MEK)	ND		200	127		ug/L		64	55 - 150
Carbon disulfide	ND		50.0	48.8		ug/L		98	48 - 150
Carbon tetrachloride	ND		50.0	55.3		ug/L		111	55 - 145
Chlorobenzene	ND		50.0	49.5		ug/L		99	64 - 130
Dibromochloromethane	ND		50.0	53.6		ug/L		107	56 - 143
Chloroethane	ND		50.0	47.7		ug/L		95	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	2.57	J F1	ug/L		5	10 - 150
Chloroform	ND		50.0	50.5		ug/L		101	60 - 141
1-Chlorohexane	ND		50.0	52.5		ug/L		105	56 - 136
Chloromethane	ND		50.0	44.5		ug/L		89	49 - 148
cis-1,2-Dichloroethene	ND		50.0	52.5		ug/L		105	59 - 143
cis-1,3-Dichloropropene	ND		50.0	51.5		ug/L		103	57 - 140
1,2-Dichlorobenzene	ND		50.0	50.1		ug/L		100	52 - 137
1,3-Dichlorobenzene	ND		50.0	49.4		ug/L		99	54 - 135
1,4-Dichlorobenzene	ND		50.0	48.8		ug/L		98	53 - 135
Dichlorodifluoromethane	ND		50.0	27.6		ug/L		55	16 - 150
1,1-Dichloroethane	ND		50.0	53.0		ug/L		106	61 - 144
1,2-Dichloroethane	ND		50.0	50.3		ug/L		101	60 - 141
1,1-Dichloroethene	ND		50.0	46.2		ug/L		92	54 - 147
1,2-Dichloropropane	ND		50.0	52.5		ug/L		105	66 - 137
1,3-Dichloropropane	ND		50.0	51.0		ug/L		102	66 - 133
2,2-Dichloropropane	ND		50.0	49.9		ug/L		100	42 - 144
1,1-Dichloropropene	ND		50.0	49.5		ug/L		99	65 - 136
Ethylbenzene	ND		50.0	50.8		ug/L		102	58 - 131
Ethyl methacrylate	ND		50.0	54.5		ug/L		109	64 - 130
Hexachlorobutadiene	ND		50.0	42.6		ug/L		85	31 - 149
2-Hexanone	ND		200	158		ug/L		79	65 - 140
Isopropylbenzene	ND		50.0	47.7		ug/L		95	56 - 133
Methylene bromide	ND		50.0	45.4		ug/L		91	63 - 138
Methylene Chloride	ND		50.0	50.8		ug/L		102	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	201		ug/L		100	63 - 146
Methyl tert-butyl ether	4.8		50.0	50.3		ug/L		91	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.8		ug/L		100	57 - 130
Naphthalene	ND		50.0	45.2		ug/L		90	25 - 150
n-Butylbenzene	ND		50.0	48.2		ug/L		96	41 - 142
N-Propylbenzene	ND		50.0	50.2		ug/L		100	51 - 138
o-Chlorotoluene	ND		50.0	49.9		ug/L		100	53 - 134
o-Xylene	ND		50.0	49.5		ug/L		99	61 - 130
p-Chlorotoluene	ND		50.0	49.1		ug/L		98	54 - 133

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

Lab Sample ID: 400-172968-10 MS
Matrix: Water
Analysis Batch: 448326

Client Sample ID: MW28-ROX-071019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	ND		50.0	48.8		ug/L		98	48 - 139
sec-Butylbenzene	ND		50.0	47.6		ug/L		95	50 - 138
Styrene	ND		50.0	46.6		ug/L		93	58 - 131
tert-Butylbenzene	ND		50.0	48.3		ug/L		97	54 - 146
1,1,1,2-Tetrachloroethane	ND	*	50.0	59.5		ug/L		119	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	49.8		ug/L		100	66 - 135
Tetrachloroethene	ND		50.0	47.4		ug/L		95	52 - 133
Toluene	ND		50.0	50.4		ug/L		101	65 - 130
trans-1,2-Dichloroethene	ND		50.0	50.3		ug/L		101	61 - 143
trans-1,3-Dichloropropene	ND		50.0	55.0		ug/L		110	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	44.9		ug/L		90	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	44.5		ug/L		89	39 - 148
1,1,1-Trichloroethane	ND		50.0	50.3		ug/L		101	57 - 142
1,1,2-Trichloroethane	ND		50.0	51.1		ug/L		102	66 - 131
Trichloroethene	ND		50.0	49.2		ug/L		98	64 - 136
Trichlorofluoromethane	ND		50.0	41.5		ug/L		83	54 - 150
1,2,3-Trichloropropane	ND		50.0	46.8		ug/L		94	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	47.4		ug/L		95	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	48.0		ug/L		96	52 - 135
Vinyl acetate	ND		100	104		ug/L		104	26 - 150
Vinyl chloride	ND		50.0	44.1		ug/L		88	46 - 150
Xylenes, Total	ND		100	99.3		ug/L		99	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 400-172968-10 MSD
Matrix: Water
Analysis Batch: 448326

Client Sample ID: MW28-ROX-071019
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	112		ug/L		56	43 - 150	10	30
Acrolein	ND		500	612		ug/L		122	38 - 150	7	31
Acrylonitrile	ND		500	578		ug/L		116	62 - 149	12	30
Benzene	ND		50.0	51.2		ug/L		102	56 - 142	2	30
Bromobenzene	ND		50.0	44.8		ug/L		90	59 - 136	6	30
Bromochloromethane	ND		50.0	53.8		ug/L		108	64 - 140	5	30
Bromodichloromethane	ND		50.0	52.1		ug/L		104	59 - 143	5	30
Bromoform	ND		50.0	56.3		ug/L		113	50 - 140	6	30
Bromomethane	ND		50.0	39.0		ug/L		78	10 - 150	2	50
2-Butanone (MEK)	ND		200	147		ug/L		73	55 - 150	14	30
Carbon disulfide	ND		50.0	51.3		ug/L		103	48 - 150	5	30
Carbon tetrachloride	ND		50.0	56.9		ug/L		114	55 - 145	3	30
Chlorobenzene	ND		50.0	47.9		ug/L		96	64 - 130	3	30
Dibromochloromethane	ND		50.0	56.2		ug/L		112	56 - 143	5	30
Chloroethane	ND		50.0	46.8		ug/L		94	50 - 150	2	30

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

Lab Sample ID: 400-172968-10 MSD
Matrix: Water
Analysis Batch: 448326

Client Sample ID: MW28-ROX-071019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	52.1		ug/L		104	60 - 141	3	30
1-Chlorohexane	ND		50.0	49.9		ug/L		100	56 - 136	5	30
Chloromethane	ND		50.0	43.9		ug/L		88	49 - 148	1	31
cis-1,2-Dichloroethene	ND		50.0	55.0		ug/L		110	59 - 143	5	30
cis-1,3-Dichloropropene	ND		50.0	53.6		ug/L		107	57 - 140	4	30
1,2-Dichlorobenzene	ND		50.0	45.3		ug/L		91	52 - 137	10	30
1,3-Dichlorobenzene	ND		50.0	43.3		ug/L		87	54 - 135	13	30
1,4-Dichlorobenzene	ND		50.0	42.6		ug/L		85	53 - 135	14	30
Dichlorodifluoromethane	ND		50.0	27.9		ug/L		56	16 - 150	1	31
1,1-Dichloroethane	ND		50.0	55.5		ug/L		111	61 - 144	5	30
1,2-Dichloroethane	ND		50.0	53.0		ug/L		106	60 - 141	5	30
1,1-Dichloroethene	ND		50.0	49.3		ug/L		99	54 - 147	6	30
1,2-Dichloropropane	ND		50.0	55.4		ug/L		111	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	53.7		ug/L		107	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	54.1		ug/L		108	42 - 144	8	31
1,1-Dichloropropene	ND		50.0	51.4		ug/L		103	65 - 136	4	30
Ethylbenzene	ND		50.0	48.3		ug/L		97	58 - 131	5	30
Ethyl methacrylate	ND		50.0	59.4		ug/L		119	64 - 130	9	30
Hexachlorobutadiene	ND		50.0	33.6		ug/L		67	31 - 149	24	36
2-Hexanone	ND		200	183		ug/L		91	65 - 140	15	30
Isopropylbenzene	ND		50.0	44.5		ug/L		89	56 - 133	7	30
Methylene bromide	ND		50.0	48.9		ug/L		98	63 - 138	7	30
Methylene Chloride	ND		50.0	54.0		ug/L		108	60 - 146	6	32
4-Methyl-2-pentanone (MIBK)	ND		200	227		ug/L		114	63 - 146	12	30
Methyl tert-butyl ether	4.8		50.0	55.4		ug/L		101	59 - 137	10	30
m-Xylene & p-Xylene	ND		50.0	46.8		ug/L		94	57 - 130	6	30
Naphthalene	ND		50.0	46.1		ug/L		92	25 - 150	2	30
n-Butylbenzene	ND		50.0	39.2		ug/L		78	41 - 142	21	31
N-Propylbenzene	ND		50.0	44.7		ug/L		89	51 - 138	12	30
o-Chlorotoluene	ND		50.0	45.4		ug/L		91	53 - 134	10	30
o-Xylene	ND		50.0	46.8		ug/L		94	61 - 130	6	30
p-Chlorotoluene	ND		50.0	43.8		ug/L		88	54 - 133	12	30
p-Isopropyltoluene	ND		50.0	41.4		ug/L		83	48 - 139	17	30
sec-Butylbenzene	ND		50.0	42.1		ug/L		84	50 - 138	12	30
Styrene	ND		50.0	43.8		ug/L		88	58 - 131	6	30
tert-Butylbenzene	ND		50.0	43.0		ug/L		86	54 - 146	12	30
1,1,1,2-Tetrachloroethane	ND	*	50.0	60.0		ug/L		120	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	53.8		ug/L		108	66 - 135	8	30
Tetrachloroethene	ND		50.0	47.3		ug/L		95	52 - 133	0	30
Toluene	ND		50.0	50.8		ug/L		102	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	51.3		ug/L		103	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	58.5		ug/L		117	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	40.5		ug/L		81	43 - 145	10	30
1,2,4-Trichlorobenzene	ND		50.0	37.3		ug/L		75	39 - 148	18	30
1,1,1-Trichloroethane	ND		50.0	51.5		ug/L		103	57 - 142	2	30
1,1,2-Trichloroethane	ND		50.0	53.9		ug/L		108	66 - 131	5	30
Trichloroethene	ND		50.0	49.9		ug/L		100	64 - 136	2	30
Trichlorofluoromethane	ND		50.0	41.0		ug/L		82	54 - 150	1	30

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

Lab Sample ID: 400-172968-10 MSD
Matrix: Water
Analysis Batch: 448326

Client Sample ID: MW28-ROX-071019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		50.0	50.7		ug/L		101	65 - 133	8	30
1,2,4-Trimethylbenzene	ND		50.0	41.6		ug/L		83	50 - 139	13	30
1,3,5-Trimethylbenzene	ND		50.0	43.0		ug/L		86	52 - 135	11	30
Vinyl acetate	ND		100	107		ug/L		107	26 - 150	3	33
Vinyl chloride	ND		50.0	44.0		ug/L		88	46 - 150	0	30
Xylenes, Total	ND		100	93.6		ug/L		94	59 - 130	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
Benzenethiol	ND		10	1.7	ug/L		07/16/19 12:05	07/19/19 13:42	1
Benzoic acid	ND		30	7.3	ug/L		07/16/19 12:05	07/19/19 13:42	1
Benzyl alcohol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 13:42	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/16/19 12:05	07/19/19 13:42	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/16/19 12:05	07/19/19 13:42	1
Bis(2-ethylhexyl) phthalate	13.6		10	5.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/16/19 12:05	07/19/19 13:42	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Chloroaniline	ND		10	3.4	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Chlorophenol	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Dibenzofuran	ND		10	0.52	ug/L		07/16/19 12:05	07/19/19 13:42	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Diethyl phthalate	ND		10	0.70	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 13:42	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/16/19 12:05	07/19/19 13:42	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/16/19 12:05	07/19/19 13:42	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/16/19 12:05	07/19/19 13:42	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/16/19 12:05	07/19/19 13:42	1
1,4-Dioxane	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/16/19 12:05	07/19/19 13:42	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/16/19 12:05	07/19/19 13:42	1
Hexachloroethane	ND		10	4.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
Indene	ND		10	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
Isophorone	ND		10	0.57	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Methylphenol	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Nitroaniline	ND		10	2.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
3-Nitroaniline	ND		10	1.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Nitroaniline	ND		10	2.5	ug/L		07/16/19 12:05	07/19/19 13:42	1
Nitrobenzene	ND		10	0.55	ug/L		07/16/19 12:05	07/19/19 13:42	1
2-Nitrophenol	ND		10	0.65	ug/L		07/16/19 12:05	07/19/19 13:42	1
4-Nitrophenol	ND		10	2.1	ug/L		07/16/19 12:05	07/19/19 13:42	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 13:42	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/16/19 12:05	07/19/19 13:42	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/16/19 12:05	07/19/19 13:42	1
Pentachlorophenol	ND		20	1.8	ug/L		07/16/19 12:05	07/19/19 13:42	1
Phenol	ND		10	2.6	ug/L		07/16/19 12:05	07/19/19 13:42	1
Pyridine	ND		10	3.2	ug/L		07/16/19 12:05	07/19/19 13:42	1
Quinoline	ND		10	6.0	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/16/19 12:05	07/19/19 13:42	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/19 12:05	07/19/19 13:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
2-Fluorophenol	*39*		*10 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
Nitrobenzene-d5	*96*		*27 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
Phenol-d5	*71*		*10 - 120*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
Terphenyl-d14	*92*		*53 - 125*	*07/16/19 12:05*	*07/19/19 13:42*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*07/16/19 12:05*	*07/19/19 13:42*	*1*

Lab Sample ID: LCS 400-448199/2-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		5	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*38*		*10 - 120*
Nitrobenzene-d5	*91*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*84*		*53 - 125*
2,4,6-Tribromophenol	*47*		*15 - 135*

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

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	33.0		ug/L		110	29 - 120
Benzoic acid	117	45.3		ug/L		39	10 - 150
Benzyl alcohol	30.0	28.7		ug/L		96	19 - 125
Bis(2-chloroethoxy)methane	30.0	24.6		ug/L		82	45 - 120
Bis(2-chloroethyl)ether	30.0	20.8		ug/L		69	48 - 120
bis (2-chloroisopropyl) ether	30.0	26.6		ug/L		89	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	37.7		ug/L		126	48 - 150
4-Bromophenyl phenyl ether	30.0	24.6		ug/L		82	55 - 122
Butyl benzyl phthalate	30.0	26.2		ug/L		87	46 - 145
4-Chloroaniline	30.0	28.4		ug/L		95	30 - 120
4-Chloro-3-methylphenol	30.0	30.2		ug/L		101	39 - 140
2-Chloronaphthalene	30.0	24.1		ug/L		80	52 - 120
2-Chlorophenol	30.0	26.3		ug/L		88	34 - 120
4-Chlorophenyl phenyl ether	30.0	24.3		ug/L		81	58 - 124
Dibenz[a,h]acridine	30.0	16.6		ug/L		55	46 - 149
Dibenzofuran	30.0	24.9		ug/L		83	58 - 123
3,3'-Dichlorobenzidine	40.0	55.0	*	ug/L		138	39 - 135
2,4-Dichlorophenol	30.0	29.1		ug/L		97	39 - 128
Diethyl phthalate	30.0	28.4		ug/L		95	44 - 146
2,4-Dimethylphenol	30.0	27.5		ug/L		92	44 - 120
Dimethyl phthalate	30.0	26.9		ug/L		90	50 - 131
Di-n-butyl phthalate	30.0	29.4		ug/L		98	55 - 131
4,6-Dinitro-ortho-cresol	60.0	67.8		ug/L		113	10 - 150
2,4-Dinitrophenol	60.0	76.7		ug/L		128	10 - 150
2,4-Dinitrotoluene	30.0	28.3		ug/L		94	58 - 140
2,6-Dinitrotoluene	30.0	27.8		ug/L		93	57 - 130
Di-n-octyl phthalate	30.0	27.7		ug/L		92	50 - 150
1,4-Dioxane	30.0	18.6		ug/L		62	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	28.0		ug/L		93	47 - 123
Hexachlorobenzene	30.0	24.9		ug/L		83	52 - 131
Hexachlorocyclopentadiene	30.0	10.1	J	ug/L		34	10 - 129
Hexachloroethane	30.0	17.2		ug/L		57	41 - 120
Indene	30.0	22.5		ug/L		75	47 - 120
Isophorone	30.0	27.5		ug/L		92	49 - 120
2-Methylphenol	30.0	28.5		ug/L		95	39 - 123
3 & 4 Methylphenol	30.0	26.2		ug/L		87	38 - 121
2-Nitroaniline	30.0	33.4		ug/L		111	47 - 150
3-Nitroaniline	30.0	33.4		ug/L		111	34 - 132
4-Nitroaniline	30.0	34.3		ug/L		114	41 - 135
Nitrobenzene	30.0	27.9		ug/L		93	47 - 120
2-Nitrophenol	30.0	28.5		ug/L		95	28 - 136
4-Nitrophenol	60.0	56.5		ug/L		94	10 - 150
N-Nitrosodimethylamine	30.0	32.3		ug/L		108	22 - 148
N-Nitrosodi-n-propylamine	30.0	28.3		ug/L		94	44 - 120
N-Nitrosodiphenylamine	29.8	27.4		ug/L		92	56 - 120
Pentachlorophenol	60.0	54.8		ug/L		91	15 - 141
Phenol	30.0	22.2		ug/L		74	33 - 120
Pyridine	60.0	47.1		ug/L		78	26 - 120

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

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	27.2		ug/L		91	51 - 129
2,4,5-Trichlorophenol	30.0	27.8		ug/L		93	38 - 147
2,4,6-Trichlorophenol	30.0	27.9		ug/L		93	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*97*		*27 - 120*
Phenol-d5	*76*		*10 - 120*
Terphenyl-d14	*82*		*53 - 125*
2,4,6-Tribromophenol	*78*		*15 - 135*

Lab Sample ID: LCSD 400-448199/3-A
Matrix: Water
Analysis Batch: 448687

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120	24	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*34 - 120*
2-Fluorophenol	*34*		*10 - 120*
Nitrobenzene-d5	*91*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*86*		*53 - 125*
2,4,6-Tribromophenol	*45*		*15 - 135*

Lab Sample ID: 400-172968-4 MS
Matrix: Water
Analysis Batch: 448687

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND	F2	2.16	1.83		ug/L		85	10 - 143
Benzoic acid	ND	F2	8.38	1.37	J	ug/L		16	10 - 134
Benzyl alcohol	ND	F2	2.16	1.71		ug/L		79	10 - 154
Bis(2-chloroethoxy)methane	ND	F2	2.16	1.48		ug/L		69	14 - 147
Bis(2-chloroethyl)ether	ND	F2	2.16	1.23		ug/L		57	28 - 130
bis (2-chloroisopropyl) ether	ND	F2	2.16	1.60		ug/L		74	10 - 141
Bis(2-ethylhexyl) phthalate	ND	F2	2.16	1.99		ug/L		92	43 - 160
4-Bromophenyl phenyl ether	ND	F2	2.16	1.50		ug/L		70	26 - 159
Butyl benzyl phthalate	ND	F2	2.16	1.59		ug/L		74	43 - 151
4-Chloroaniline	ND	F2	2.16	1.74		ug/L		81	10 - 152
4-Chloro-3-methylphenol	ND	F2	2.16	1.78		ug/L		83	17 - 156
2-Chloronaphthalene	ND	F2	2.16	1.52		ug/L		70	10 - 155
2-Chlorophenol	ND	F2	2.16	1.24		ug/L		58	19 - 130
4-Chlorophenyl phenyl ether	ND	F2	2.16	1.52		ug/L		70	25 - 161
Dibenz[a,h]acridine	ND	F2	2.16	1.13		ug/L		53	42 - 147
Dibenzofuran	ND	F2	2.16	1.54		ug/L		72	18 - 157

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

Lab Sample ID: 400-172968-4 MS
Matrix: Water
Analysis Batch: 448687

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	ND	F2 *	2.88	2.96		ug/L		103	10 - 172
2,4-Dichlorophenol	ND	F2	2.16	1.63		ug/L		75	16 - 147
Diethyl phthalate	ND	F2	2.16	1.69		ug/L		78	23 - 160
2,4-Dimethylphenol	ND	F2	2.16	1.74		ug/L		81	25 - 146
Dimethyl phthalate	ND	F2	2.16	1.60		ug/L		74	11 - 158
Di-n-butyl phthalate	ND	F2	2.16	1.81		ug/L		84	28 - 162
4,6-Dinitro-ortho-cresol	ND	F2	4.31	4.18		ug/L		97	10 - 168
2,4-Dinitrophenol	ND	F2	4.31	5.04		ug/L		117	10 - 166
2,4-Dinitrotoluene	ND	F2	2.16	1.73		ug/L		80	26 - 158
2,6-Dinitrotoluene	ND	F2	2.16	1.70		ug/L		79	19 - 157
Di-n-octyl phthalate	ND	F2	2.16	1.69		ug/L		78	42 - 150
1,4-Dioxane	ND	F2	2.16	1.06		ug/L		49	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	2.16	1.69		ug/L		78	19 - 162
Hexachlorobenzene	ND	F2	2.16	1.54		ug/L		71	45 - 145
Hexachlorocyclopentadiene	ND	F2	2.16	0.684	J	ug/L		32	10 - 151
Hexachloroethane	ND	F2	2.16	1.31		ug/L		61	29 - 130
Indene	ND	F2	2.16	1.38		ug/L		64	22 - 130
Isophorone	ND	F2	2.16	1.67		ug/L		78	24 - 144
2-Methylphenol	ND	F2	2.16	1.63		ug/L		75	22 - 130
3 & 4 Methylphenol	ND	F2	2.16	1.50		ug/L		70	31 - 130
2-Nitroaniline	ND	F2	2.16	2.06		ug/L		96	10 - 162
3-Nitroaniline	ND	F2	2.16	2.02		ug/L		94	10 - 163
4-Nitroaniline	ND	F2	2.16	2.15		ug/L		100	10 - 162
Nitrobenzene	ND	F2	2.16	1.72		ug/L		80	34 - 135
2-Nitrophenol	ND	F2	2.16	1.63		ug/L		75	27 - 134
4-Nitrophenol	ND	F2	4.31	3.72		ug/L		86	10 - 175
N-Nitrosodimethylamine	ND	F2	2.16	2.15		ug/L		100	10 - 139
N-Nitrosodi-n-propylamine	ND	F2	2.16	1.73		ug/L		80	13 - 147
N-Nitrosodiphenylamine	ND	F2	2.14	1.60		ug/L		75	31 - 150
Pentachlorophenol	ND	F2	4.31	3.44		ug/L		80	10 - 180
Phenol	ND	F2	2.16	1.21		ug/L		56	23 - 130
Pyridine	ND	F2	4.31	2.82		ug/L		65	10 - 130
Quinoline	ND	F2	2.16	1.67		ug/L		77	10 - 180
2,4,5-Trichlorophenol	ND	F2	2.16	1.59		ug/L		74	43 - 137
2,4,6-Trichlorophenol	ND	F2	2.16	1.57		ug/L		73	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*34 - 120*
2-Fluorophenol	*30*		*10 - 120*
Nitrobenzene-d5	*88*		*27 - 120*
Phenol-d5	*58*		*10 - 120*
Terphenyl-d14	*66*		*53 - 125*
2,4,6-Tribromophenol	*65*		*15 - 135*

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

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448687

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND	F2	31.5	28.5	F4	ug/L		90	10 - 143	176	63
Benzoic acid	ND	F2	122	58.1	F4	ug/L		48	10 - 134	191	49
Benzyl alcohol	ND	F2	31.5	26.3	F4	ug/L		84	10 - 154	176	37
Bis(2-chloroethoxy)methane	ND	F2	31.5	22.3	F4	ug/L		71	14 - 147	175	70
Bis(2-chloroethyl)ether	ND	F2	31.5	18.8	F4	ug/L		60	28 - 130	176	42
bis (2-chloroisopropyl) ether	ND	F2	31.5	25.2	F4	ug/L		80	10 - 141	176	41
Bis(2-ethylhexyl) phthalate	ND	F2	31.5	27.5	F4	ug/L		87	43 - 160	173	35
4-Bromophenyl phenyl ether	ND	F2	31.5	23.3	F4	ug/L		74	26 - 159	176	30
Butyl benzyl phthalate	ND	F2	31.5	24.2	F4	ug/L		77	43 - 151	175	32
4-Chloroaniline	ND	F2	31.5	26.7	F4	ug/L		85	10 - 152	175	94
4-Chloro-3-methylphenol	ND	F2	31.5	27.0	F4	ug/L		86	17 - 156	175	40
2-Chloronaphthalene	ND	F2	31.5	22.9	F4	ug/L		73	10 - 155	175	29
2-Chlorophenol	ND	F2	31.5	20.5	F4	ug/L		65	19 - 130	177	42
4-Chlorophenyl phenyl ether	ND	F2	31.5	23.2	F4	ug/L		74	25 - 161	175	27
Dibenz[a,h]acridine	ND	F2	31.5	19.6	F4	ug/L		62	42 - 147	178	40
Dibenzofuran	ND	F2	31.5	23.5	F4	ug/L		75	18 - 157	175	29
3,3'-Dichlorobenzidine	ND	F2 *	41.9	44.6	F4	ug/L		106	10 - 172	175	58
2,4-Dichlorophenol	ND	F2	31.5	24.7	F4	ug/L		78	16 - 147	175	43
Diethyl phthalate	ND	F2	31.5	24.4	F4	ug/L		78	23 - 160	174	40
2,4-Dimethylphenol	ND	F2	31.5	26.0	F4	ug/L		83	25 - 146	175	47
Dimethyl phthalate	ND	F2	31.5	23.1	F4	ug/L		73	11 - 158	174	36
Di-n-butyl phthalate	ND	F2	31.5	28.1	F4	ug/L		89	28 - 162	176	32
4,6-Dinitro-ortho-cresol	ND	F2	62.9	61.9	F4	ug/L		98	10 - 168	175	42
2,4-Dinitrophenol	ND	F2	62.9	74.7	F4	ug/L		119	10 - 166	175	36
2,4-Dinitrotoluene	ND	F2	31.5	25.9	F4	ug/L		82	26 - 158	175	28
2,6-Dinitrotoluene	ND	F2	31.5	25.1	F4	ug/L		80	19 - 157	175	28
Di-n-octyl phthalate	ND	F2	31.5	26.3	F4	ug/L		83	42 - 150	176	35
1,4-Dioxane	ND	F2	31.5	12.3	F4	ug/L		39	10 - 130	168	40
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	31.5	25.7	F4	ug/L		82	19 - 162	175	40
Hexachlorobenzene	ND	F2	31.5	24.0	F4	ug/L		76	45 - 145	176	33
Hexachlorocyclopentadiene	ND	F2	31.5	10.6	J F4	ug/L		34	10 - 151	176	50
Hexachloroethane	ND	F2	31.5	21.4	F4	ug/L		68	29 - 130	177	41
Indene	ND	F2	31.5	22.3	F4	ug/L		71	22 - 130	177	40
Isophorone	ND	F2	31.5	25.4	F4	ug/L		81	24 - 144	175	33
2-Methylphenol	ND	F2	31.5	25.0	F4	ug/L		80	22 - 130	176	47
3 & 4 Methylphenol	ND	F2	31.5	23.1	F4	ug/L		73	31 - 130	176	47
2-Nitroaniline	ND	F2	31.5	30.2	F4	ug/L		96	10 - 162	174	33
3-Nitroaniline	ND	F2	31.5	29.8	F4	ug/L		95	10 - 163	175	39
4-Nitroaniline	ND	F2	31.5	32.4	F4	ug/L		103	10 - 162	175	50
Nitrobenzene	ND	F2	31.5	26.0	F4	ug/L		83	34 - 135	175	35
2-Nitrophenol	ND	F2	31.5	24.7	F4	ug/L		79	27 - 134	175	43
4-Nitrophenol	ND	F2	62.9	52.2	F4	ug/L		83	10 - 175	173	82
N-Nitrosodimethylamine	ND	F2	31.5	31.8	F4	ug/L		101	10 - 139	175	62
N-Nitrosodi-n-propylamine	ND	F2	31.5	26.5	F4	ug/L		84	13 - 147	175	36
N-Nitrosodiphenylamine	ND	F2	31.2	23.5	F4	ug/L		75	31 - 150	174	34
Pentachlorophenol	ND	F2	62.9	51.6	F4	ug/L		82	10 - 180	175	42
Phenol	ND	F2	31.5	18.8	F4	ug/L		60	23 - 130	176	52
Pyridine	ND	F2	62.9	44.0	F4	ug/L		70	10 - 130	176	55

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

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448687

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Quinoline	ND	F2	31.5	25.3	F4	ug/L		80	10 - 180	175	40
2,4,5-Trichlorophenol	ND	F2	31.5	24.0	F4	ug/L		76	43 - 137	175	42
2,4,6-Trichlorophenol	ND	F2	31.5	23.4	F4	ug/L		74	42 - 135	175	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*34 - 120*
2-Fluorophenol	*40*		*10 - 120*
Nitrobenzene-d5	*92*		*27 - 120*
Phenol-d5	*63*		*10 - 120*
Terphenyl-d14	*66*		*53 - 125*
2,4,6-Tribromophenol	*68*		*15 - 135*

Lab Sample ID: MB 400-449866/1-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449866

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/29/19 09:47	07/31/19 17:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*41*		*34 - 120*	*07/29/19 09:47*	*07/31/19 17:55*	*1*
2-Fluorophenol	*28*		*10 - 120*	*07/29/19 09:47*	*07/31/19 17:55*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*07/29/19 09:47*	*07/31/19 17:55*	*1*
Phenol-d5	*47*		*10 - 120*	*07/29/19 09:47*	*07/31/19 17:55*	*1*
Terphenyl-d14	*56*		*53 - 125*	*07/29/19 09:47*	*07/31/19 17:55*	*1*
2,4,6-Tribromophenol	*38*		*15 - 135*	*07/29/19 09:47*	*07/31/19 17:55*	*1*

Lab Sample ID: LCS 400-449866/2-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449866

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	30.0	19.0		ug/L		63	48 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*49*		*34 - 120*
2-Fluorophenol	*30*		*10 - 120*
Nitrobenzene-d5	*86*		*27 - 120*
Phenol-d5	*58*		*10 - 120*
Terphenyl-d14	*60*		*53 - 125*
2,4,6-Tribromophenol	*61*		*15 - 135*

Lab Sample ID: LCSD 400-449866/3-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449866

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	30.0	16.0		ug/L		53	48 - 150	17	30

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	44		34 - 120
2-Fluorophenol	20		10 - 120
Nitrobenzene-d5	80		27 - 120
Phenol-d5	50		10 - 120
Terphenyl-d14	51	X	53 - 125
2,4,6-Tribromophenol	53		15 - 135

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

Lab Sample ID: MB 400-448199/1-A
Matrix: Water
Analysis Batch: 448502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Anthracene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Chrysene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Fluoranthene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Fluorene	ND		0.20	0.021	ug/L		07/16/19 12:05	07/18/19 14:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/16/19 12:05	07/18/19 14:09	1
Phenanthrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
Pyrene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/16/19 12:05	07/18/19 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	89		33 - 138	07/16/19 12:05	07/18/19 14:09	1
2-Fluorobiphenyl	72		15 - 122	07/16/19 12:05	07/18/19 14:09	1
Nitrobenzene-d5	70		19 - 130	07/16/19 12:05	07/18/19 14:09	1

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	30.3		ug/L		101	41 - 120
Acenaphthylene	30.0	30.5		ug/L		102	44 - 120
Anthracene	30.0	30.4		ug/L		101	49 - 120
Benzo[a]anthracene	30.0	28.5		ug/L		95	61 - 135
Benzo[a]pyrene	30.0	29.4		ug/L		98	52 - 120
Benzo[b]fluoranthene	30.0	31.1		ug/L		104	53 - 134
Benzo[g,h,i]perylene	30.0	32.2		ug/L		107	47 - 133
Benzo[k]fluoranthene	30.0	29.2		ug/L		97	57 - 134
Chrysene	30.0	29.3		ug/L		98	55 - 122

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

Lab Sample ID: LCS 400-448199/4-A
Matrix: Water
Analysis Batch: 448502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	30.0	33.4		ug/L		111	48 - 146
Fluoranthene	30.0	31.5		ug/L		105	54 - 128
Fluorene	30.0	32.5		ug/L		108	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	32.7		ug/L		109	43 - 142
Phenanthrene	30.0	31.0		ug/L		103	48 - 120
Pyrene	30.0	29.0		ug/L		97	48 - 132
1-Methylnaphthalene	30.0	24.7		ug/L		82	41 - 120
2-Methylnaphthalene	30.0	24.1		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*88*		*19 - 130*

Lab Sample ID: 400-172968-4 MS
Matrix: Water
Analysis Batch: 448954

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND	F2	2.16	1.57		ug/L		73	35 - 113
Acenaphthylene	ND	F2	2.16	1.51		ug/L		70	41 - 118
Anthracene	ND	F2	2.16	1.44		ug/L		67	45 - 122
Benzo[a]anthracene	ND	F2	2.16	1.38		ug/L		64	55 - 133
Benzo[a]pyrene	ND	F2	2.16	1.37		ug/L		63	50 - 108
Benzo[b]fluoranthene	ND	F2	2.16	1.47		ug/L		68	50 - 128
Benzo[g,h,i]perylene	ND	F2	2.16	1.56		ug/L		72	46 - 133
Benzo[k]fluoranthene	ND	F2	2.16	1.36		ug/L		63	52 - 128
Chrysene	ND	F2	2.16	1.38		ug/L		64	52 - 116
Dibenz(a,h)anthracene	ND	F2	2.16	1.66		ug/L		77	52 - 143
Fluoranthene	ND	F2	2.16	1.34		ug/L		62	32 - 150
Fluorene	ND	F2	2.16	1.74		ug/L		80	15 - 150
Indeno[1,2,3-cd]pyrene	ND	F2	2.16	1.59		ug/L		74	41 - 141
Phenanthrene	ND	F2	2.16	1.52		ug/L		71	36 - 125
Pyrene	ND	F2	2.16	1.70		ug/L		79	41 - 127
1-Methylnaphthalene	ND	F2	2.16	1.28		ug/L		59	10 - 150
2-Methylnaphthalene	ND	F2	2.16	1.25		ug/L		58	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*75*		*33 - 138*
2-Fluorobiphenyl	*67*		*15 - 122*
Nitrobenzene-d5	*37*		*19 - 130*

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448954

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND	F2	31.5	27.3	F4	ug/L		87	35 - 113	178	49

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

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448954

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND	F2	31.5	26.0	F4	ug/L		83	41 - 118	178	48
Anthracene	ND	F2	31.5	25.5	F4	ug/L		81	45 - 122	179	56
Benzo[a]anthracene	ND	F2	31.5	24.5	F4	ug/L		78	55 - 133	179	57
Benzo[a]pyrene	ND	F2	31.5	23.8	F4	ug/L		76	50 - 108	178	59
Benzo[b]fluoranthene	ND	F2	31.5	25.6	F4	ug/L		81	50 - 128	178	62
Benzo[g,h,i]perylene	ND	F2	31.5	25.3	F4	ug/L		80	46 - 133	177	58
Benzo[k]fluoranthene	ND	F2	31.5	25.5	F4	ug/L		81	52 - 128	180	58
Chrysene	ND	F2	31.5	25.1	F4	ug/L		80	52 - 116	179	59
Dibenz(a,h)anthracene	ND	F2	31.5	26.3	F4	ug/L		84	52 - 143	176	60
Fluoranthene	ND	F2	31.5	24.0	F4	ug/L		76	32 - 150	179	59
Fluorene	ND	F2	31.5	30.1	F4	ug/L		96	15 - 150	178	49
Indeno[1,2,3-cd]pyrene	ND	F2	31.5	25.7	F4	ug/L		82	41 - 141	177	58
Phenanthrene	ND	F2	31.5	26.9	F4	ug/L		85	36 - 125	179	69
Pyrene	ND	F2	31.5	31.7	F4	ug/L		101	41 - 127	180	58
1-Methylnaphthalene	ND	F2	31.5	21.7	F4	ug/L		69	10 - 150	178	66
2-Methylnaphthalene	ND	F2	31.5	21.6	F4	ug/L		69	10 - 150	178	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*89*		*33 - 138*
2-Fluorobiphenyl	*80*		*15 - 122*
Nitrobenzene-d5	*69*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-448410/1-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448410

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		07/17/19 13:20	07/17/19 16:11	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/17/19 13:20	07/17/19 16:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*07/17/19 13:20*	*07/17/19 16:11*	*1*

Lab Sample ID: LCS 400-448410/2-A
Matrix: Water
Analysis Batch: 448449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.185	*	ug/L		185	60 - 140
1,2-Dibromoethane	0.100	0.122		ug/L		122	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-172968-4 MS
Matrix: Water
Analysis Batch: 448449

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448410

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F1 *	0.0956	0.171	F1	ug/L		178	65 - 135
1,2-Dibromoethane	ND		0.0956	0.113		ug/L		119	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*51 - 149*

Lab Sample ID: 400-172968-4 MSD
Matrix: Water
Analysis Batch: 448449

Client Sample ID: MW26-ROX-071019
Prep Type: Total/NA
Prep Batch: 448410

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 *	0.0992	0.187	F1	ug/L		189	65 - 135	9	20
1,2-Dibromoethane	ND		0.0992	0.121		ug/L		122	65 - 135	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: MB 400-448551/1-A
Matrix: Water
Analysis Batch: 448653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448551

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		07/18/19 12:20	07/18/19 20:34	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/18/19 12:20	07/18/19 20:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/18/19 12:20*	*07/18/19 20:34*	*1*

Lab Sample ID: LCS 400-448551/2-A
Matrix: Water
Analysis Batch: 448653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.124		ug/L		124	60 - 140
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*51 - 149*

Lab Sample ID: LCSD 400-448551/3-A
Matrix: Water
Analysis Batch: 448653

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448551

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.126		ug/L		126	60 - 140	6	30
1,2-Dibromoethane	0.100	0.109		ug/L		109	60 - 140	3	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-448551/3-A
Matrix: Water
Analysis Batch: 448653

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448551

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	91		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (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**
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/RV02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 7/10/19
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 60592794 - 1.03.003 / 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): elizabeth.kunkel@aecom.com
PHONE NO: 314-802-1171
E-MAIL:
AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): J. Ragatz, I. Partin

LAB USE ONLY

TELEPHONE: 314-429-0100
FAX: 314-429-0462
Rel To Content E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL
	TB-ROX-071019-8260-A	7/10/19	0000	WATER	X					2	2			
	TB-ROX-071019-8011-A		0000		X					2			2	
	MW3-ROX-071019		0905		X			X		6	2	1	2	1
	MW26-ROX-071019		1035		X			X		6	2	1	2	1
	MW26-ROX-071019-MS		1035		X			X		6	2	1	2	1
	MW26-ROX-071019-MSD		1035		X			X		6	2	1	2	1
	MW12-ROX-071019		1210		X			X		6	2	1	2	1

400-172968 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	4782 2882 5436 / Fedex: 4782 2882 5447 / 4782 2882 5458	7/10/19	1800
		7/11/19	9:39

Version: 14Dec15

Custody seals #'s: 819082, 819083, 819084, 819085, 819086, 819087

3.5°C, 5.8°C, 1.4°C JD7

8/1/2019

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

PO #: 60592794 - 1.03.003 | 60592794 - 1.03.0033

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 7/10/19
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
60592794 - 1.03.003 | 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): elizabeth.kunkel@aecom.com
PHONE NO.: 314 802 1171
E MAIL:
AECOM Other ID:

PROJECT CONTACT (hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): B. Howell T. Jones

LAB USE ONLY

TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - SWQCB 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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-071019-8260-B	7/10/19	0000	Water	X					2	2				
	TB-ROX-071019-8011-B		0000		X					2			2		
	TRIP14-ROX-071019		0830		X			X		6	2	1	2	1	
	P166-ROX-071019		0910		X			X		6	2	1	2	1	
	MW28-ROX-07/019		1055		X			X		6	2	1	2	1	
	MW9-ROX-07/019		1205		X			X		6	2	1	2	1	
	MW9-ROX-07/019-DUP		1205		X			X		6	2	1	2	1	

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
B. Howell	Fedex : SAME AS Page 1 of COC	7/10/19	1800
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

Version: 14Dec15

Custody Seal #'s : same as page 1 of COC

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-172968-1

Login Number: 172968
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.5°C, 5.8°C, 1.4°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Accreditation/Certification Summary

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

Job ID: 400-172968-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-173038-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/7/2019

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

Sample Identification	Sample Identification
TB-ROX-071119-8260	MW6A-ROX-071119
MW6B-ROX-071119	MW6D-ROX-071119
MW6C-ROX-071119	MW1-ROX-071119-EB
MW1-ROX-071119	ROST3MW-ROX-071119
TB-ROX-071119-8011	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated bis(2-ethylhexyl) phthalate was detected in equipment blank MW1-ROX-071119-EB. The LCS and or LCSD recoveries for benzenethiol and 3,3'-dichlorobenzidine were outside evaluation criteria. The SVOC and/or PAH surrogate recovery for terphenyl-d_{14} was outside criteria in several investigative and quality control samples. Several VOC, SVOC, and PAH MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample MW6A-ROX-071119. The PAH internal standard area recovery for perylene-d_{12} was outside criteria in sample MW6B-ROX-071119. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low; and the continuing calibration verification for pyrene was outside evaluation criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MW1-ROX-071119-EB	SVOCs	bis(2-Ethylhexyl) phthalate	17 µg/L

Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. 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 400-448378/26-A/27-A	SVOCs	Benzenethiol	**0.8/0.7**	15	10-120/30
LCS 400-448378/2-A	SVOCs	3,3'-Dichlorobenzidine	**150**	NA	39-135

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-448378/26-A/27-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-071119	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-071119	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-071119	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-071119	SVOCs	Benzenethiol	**UJ**
MW1-ROX-071119	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-071119	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6A-ROX-071119	SVOCs	Terphenyl-d_{14}	**38**	53-125
MW6B-ROX-071119	SVOCs	Terphenyl-d_{14}	**45**	53-125
MW6D-ROX-071119	SVOCs	Terphenyl-d_{14}	**47**	53-125
MW6C-ROX-071119	SVOCs	Terphenyl-d_{14}	**48**	53-125
MW1-ROX-071119	PAHs	Terphenyl-d_{14}	**30**	33-138
MW1-ROX-071119	SVOCs	Terphenyl-d_{14}	**21**	53-125
ROST3MW-ROX-071119	SVOCs	Terphenyl-d_{14}	**39**	53-125
MB 400-448378/1-A	SVOCs	Terphenyl-d_{14}	**49**	53-125

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-448378/26-A	SVOCs	Terphenyl-d_{14}	**48**	53-125
MW6A-ROX-071119 MS	SVOCs	Terphenyl-d_{14}	**45**	53-125
MW6A-ROX-071119 MSD	SVOCs	Terphenyl-d_{14}	**44**	53-125

Qualifications due to surrogate recoveries were not required if only one of three base/neutral fraction surrogate recoveries were outside evaluation criteria in the associated SVOC/PAH samples. Method blank and LCS 400-448378/1-A/26-A, and MW6A-ROX-071119 MS/MSD, are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW6A-ROX-071119 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-071119	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW6A-ROX-071119	SVOCs	bis(2-Ethylhexyl) phthalate	**32/35**	13	43-160/35
MW6A-ROX-071119	SVOCs	Butyl benzyl phthalate	**40/39**	1	43-151/32
MW6A-ROX-071119	SVOCs	Dibenz[a,h]acridine	**27/23**	40	42-147/11
MW6A-ROX-071119	SVOCs	3,3'-Dichlorobenzidine	**0/0**	**NC**	10-172/58
MW6A-ROX-071119	SVOCs	Di-n-octyl phthalate	**36/40**	13	42-150/35
MW6A-ROX-071119	SVOCs	n-Nitrosodiphenylamine	**28**/40	**38**	31-150/34
MW6A-ROX-071119	PAHs	Acenaphthene	**127**/91	30	35-113/49
MW6A-ROX-071119	PAHs	Acenaphthylene	**123**/89	29	41-118/48

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 MSMSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-071119	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6A-ROX-071119	SVOCs	bis(2-Ethylhexyl) phthalate	**UJ**
MW6A-ROX-071119	SVOCs	Butyl benzyl phthalate	**UJ**
MW6A-ROX-071119	SVOCs	Dibenz[a,h]acridine	**UJ**
MW6A-ROX-071119	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW6A-ROX-071119	SVOCs	Di-n-octyl phthalate	**UJ**
MW6A-ROX-071119	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
MW6B-ROX-071119	PAHs	Perylene-d_{12}	**665407**	163357-653426

Analytical data associated with the internal standard perylene-d_{12} recovery outside evaluation criteria were reported from the re-analysis run in which perylene-d_{12} recovery was within evaluation criteria. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

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 verifications for several analytes were below acceptance criteria, and the continuing calibration verification for pyrene was above acceptance criteria; these are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-071119	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW6A-ROX-071119	SVOCs	1,4-Dioxane	**UJ**
MW6A-ROX-071119	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
MW6A-ROX-071119	SVOCs	Phenol	**UJ**
MW6A-ROX-071119	SVOCs	Pyridine	**UJ**
MW6B-ROX-071119	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW6B-ROX-071119	SVOCs	Butyl benzyl phthalate	**UJ**
MW6B-ROX-071119	SVOCs	1,4-Dioxane	**UJ**
MW6B-ROX-071119	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
MW6B-ROX-071119	SVOCs	Phenol	**UJ**
MW6B-ROX-071119	SVOCs	Pyridine	**UJ**
MW6D-ROX-071119	PAHs	Pyrene	**J**
MW6D-ROX-071119	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW6D-ROX-071119	SVOCs	Butyl benzyl phthalate	**UJ**
MW6D-ROX-071119	SVOCs	1,4-Dioxane	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-071119	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	UJ
MW6D-ROX-071119	SVOCs	Phenol	UJ
MW6D-ROX-071119	SVOCs	Pyridine	UJ
MW6C-ROX-071119	SVOCs	bis(2-Chloroethyl) ether	UJ
MW6C-ROX-071119	SVOCs	Butyl benzyl phthalate	UJ
MW6C-ROX-071119	SVOCs	1,4-Dioxane	UJ
MW6C-ROX-071119	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	UJ
MW6C-ROX-071119	SVOCs	Phenol	UJ
MW6C-ROX-071119	SVOCs	Pyridine	UJ
ROST3MW-ROX-071119	SVOCs	bis(2-Chloroethyl) ether	UJ
ROST3MW-ROX-071119	SVOCs	Butyl benzyl phthalate	UJ
ROST3MW-ROX-071119	SVOCs	1,4-Dioxane	UJ
ROST3MW-ROX-071119	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	UJ
ROST3MW-ROX-071119	SVOCs	Phenol	UJ
ROST3MW-ROX-071119	SVOCs	Pyridine	UJ

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-173038-1
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:
8/6/2019 11:41:40 AM

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Reviewed 8/7/19 MR

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: 400-173038-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-173038-1

Comments
No additional comments.

Receipt
The samples were received on 7/12/2019 9:19 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.2° C, 2.5° C and 4.1° C.

GC/MS VOA
Method(s) 8260B: The initial calibration verification (ICV) analyzed in batch 400-441311 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-448412 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method(s) 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-448412 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method(s) 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-071119-8260 (400-173038-1), MW6A-ROX-071119 (400-173038-2), MW6B-ROX-071119 (400-173038-3), MW6D-ROX-071119 (400-173038-4), MW6C-ROX-071119 (400-173038-5), MW1-ROX-071119-EB (400-173038-6), MW1-ROX-071119 (400-173038-7) and ROST3MW-ROX-071119 (400-173038-8). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, an acid-labile compound that degrades in an acidic medium.

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

GC/MS Semi VOA
Method(s) 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: MW1-ROX-071119 (400-173038-7). These results have been reported and qualified.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448799 recovered above the upper control limit for 2,4-Dinitrophenol, Hexachlorobenzene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 400-448799/2).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448799 recovered outside acceptance criteria, low biased, for 1,4-Dioxane, Azobenzene, Bis(2-chloroethyl)ether, Butyl benzyl phthalate, Phenol and Pyridine . 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(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-448378 and analytical batch 400-448799 recovered outside control limits for the following analyte(s): Phenylmercaptan. Phenylmercaptan has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-448378 and analytical batch 400-448799 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(s) 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

Job ID: 400-173038-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

compounds outside limits: MW6A-ROX-071119 (400-173038-2), MW6A-ROX-071119 (400-173038-2[MS]), MW6A-ROX-071119 (400-173038-2[MSD]), MW6B-ROX-071119 (400-173038-3), MW6D-ROX-071119 (400-173038-4), MW6C-ROX-071119 (400-173038-5), MW1-ROX-071119 (400-173038-7), ROST3MW-ROX-071119 (400-173038-8), (LCS 400-448378/26-A) and (MB 400-448378/1-A). These results have been reported and qualified.

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 400-448378 and analytical batch 400-449209 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. The analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-448806 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The equipment blank has a detection of Bis(2-ethylhexyl) phthalate, however, there are no detections in the sample and the data is reported: MW1-ROX-071119-EB (400-173038-6).

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

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

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

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

Sample Summary

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

Job ID: 400-173038-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-173038-1	TB-ROX-071119-8260	Water	07/11/19 00:00	07/12/19 09:19	
400-173038-2	MW6A-ROX-071119	Water	07/11/19 09:15	07/12/19 09:19	
400-173038-3	MW6B-ROX-071119	Water	07/11/19 10:05	07/12/19 09:19	
400-173038-4	MW6D-ROX-071119	Water	07/11/19 10:45	07/12/19 09:19	
400-173038-5	MW6C-ROX-071119	Water	07/11/19 11:35	07/12/19 09:19	
400-173038-6	MW1-ROX-071119-EB	Water	07/11/19 12:02	07/12/19 09:19	
400-173038-7	MW1-ROX-071119	Water	07/11/19 13:15	07/12/19 09:19	
400-173038-8	ROST3MW-ROX-071119	Water	07/11/19 14:00	07/12/19 09:19	
400-173038-9	TB-ROX-071119-8011	Water	07/11/19 00:00	07/12/19 09:19	

Detection Summary

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

Job ID: 400-173038-1

Client Sample ID: TB-ROX-071119-8260 — Lab Sample ID: 400-173038-1

No Detections.

Client Sample ID: MW6A-ROX-071119 — Lab Sample ID: 400-173038-2

No Detections.

Client Sample ID: MW6B-ROX-071119 — Lab Sample ID: 400-173038-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.44	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW6D-ROX-071119 — Lab Sample ID: 400-173038-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.6		1.0	0.38	ug/L	1		8260B	Total/NA
Anthracene	0.030	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
Benzo[b]fluoranthene	0.043	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.023	J	0.20	0.020	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene	0.048	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Pyrene	0.022	J	0.20	0.020	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW6C-ROX-071119 — Lab Sample ID: 400-173038-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.75	J	1.0	0.38	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	5.3	J	9.9	5.0	ug/L	1		8270D	Total/NA

Client Sample ID: MW1-ROX-071119-EB — Lab Sample ID: 400-173038-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	17		9.7	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW1-ROX-071119 — Lab Sample ID: 400-173038-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.44	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: ROST3MW-ROX-071119 — Lab Sample ID: 400-173038-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.1		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	3.4	J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene	15		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	40		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	4.5		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	4.4		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	5.7		5.0	0.60	ug/L	1		8260B	Total/NA
Toluene	2.1		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	12		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	2.6		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	46		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.26		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.12	J	0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.15	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	3.6		0.19	0.019	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-173038-1

Client Sample ID: ROST3MW-ROX-071119 (Continued)

Lab Sample ID: 400-173038-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	1.4		0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: TB-ROX-071119-8011

Lab Sample ID: 400-173038-9

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-173038-1

Client Sample ID: TB-ROX-071119-8260
Date Collected: 07/11/19 00:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-1
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			07/17/19 18:58	1
Acrolein	ND		20	10	ug/L			07/17/19 18:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 18:58	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 18:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 18:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 18:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 18:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 18:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 18:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 18:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 18:58	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 18:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 18:58	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 18:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 18:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 18:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 18:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 18:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 18:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 18:58	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 18:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 18:58	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 18:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 18:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 18:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 18:58	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 18:58	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 18:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 18:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 18:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 18:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 18:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 18:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 18:58	1

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

Job ID: 400-173038-1

Client Sample ID: TB-ROX-071119-8260
Date Collected: 07/11/19 00:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-1
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			07/17/19 18:58	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 18:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 18:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 18:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 18:58	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 18:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 18:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 18:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 18:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 18:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 18:58	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 18:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 18:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 18:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 18:58	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 18:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 18:58	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/17/19 18:58*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/17/19 18:58*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/17/19 18:58*	*1*

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

Job ID: 400-173038-1

Client Sample ID: MW6A-ROX-071119
Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/17/19 17:10	1
Acrolein	ND		20	10	ug/L			07/17/19 17:10	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 17:10	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 17:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 17:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 17:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 17:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 17:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 17:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 17:10	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/17/19 17:10	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 17:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 17:10	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 17:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 17:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 17:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 17:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 17:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 17:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 17:10	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 17:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 17:10	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 17:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 17:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 17:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 17:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 17:10	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 17:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 17:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 17:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 17:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 17:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 17:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 17:10	1

Client Sample ID: MW6A-ROX-071119
Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/19 17:10	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 17:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 17:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 17:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 17:10	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 17:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 17:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 17:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 17:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 17:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 17:10	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 17:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 17:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 17:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 17:10	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 17:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 17:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*07/17/19 17:10*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*07/17/19 17:10*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/17/19 17:10*	*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	F1	0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
Acenaphthylene	ND	F1	0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
Anthracene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
Benzo[a]anthracene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Benzo[a]pyrene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Benzo[b]fluoranthene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Benzo[g,h,i]perylene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Benzo[k]fluoranthene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Chrysene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Dibenz(a,h)anthracene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Fluoranthene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
Fluorene	ND		0.21	0.022	ug/L		07/17/19 10:30	07/20/19 12:40	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:40	1
Phenanthrene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
Pyrene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1
2-Methylnaphthalene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*55*		*33 - 138*	*07/17/19 10:30*	*07/20/19 12:40*	*1*
2-Fluorobiphenyl	*57*		*15 - 122*	*07/17/19 10:30*	*07/20/19 12:40*	*1*

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

Job ID: 400-173038-1

Client Sample ID: MW6A-ROX-071119
Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	56		19 - 130	07/17/19 10:30	07/20/19 12:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
Benzenethiol	ND	* UJ	10	1.8	ug/L		07/17/19 10:30	07/20/19 15:37	1
Benzoic acid	ND		31	7.6	ug/L		07/17/19 10:30	07/20/19 15:37	1
Benzyl alcohol	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 15:37	1
Bis(2-chloroethoxy)methane	ND		10	0.72	ug/L		07/17/19 10:30	07/20/19 15:37	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.78	ug/L		07/17/19 10:30	07/20/19 15:37	1
bis (2-chloroisopropyl) ether	ND		10	0.85	ug/L		07/17/19 10:30	07/20/19 15:37	1
Bis(2-ethylhexyl) phthalate	ND	UJ	10	5.2	ug/L		07/17/19 10:30	07/20/19 15:37	1
4-Bromophenyl phenyl ether	ND		10	0.34	ug/L		07/17/19 10:30	07/20/19 15:37	1
Butyl benzyl phthalate	ND	UJ	10	0.72	ug/L		07/17/19 10:30	07/20/19 15:37	1
4-Chloroaniline	ND		10	3.6	ug/L		07/17/19 10:30	07/20/19 15:37	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
2-Chloronaphthalene	ND		10	0.54	ug/L		07/17/19 10:30	07/20/19 15:37	1
2-Chlorophenol	ND		10	2.3	ug/L		07/17/19 10:30	07/20/19 15:37	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 15:37	1
Dibenz[a,h]acridine	ND	UJ	10	3.1	ug/L		07/17/19 10:30	07/20/19 15:37	1
Dibenzofuran	ND		10	0.54	ug/L		07/17/19 10:30	07/20/19 15:37	1
3,3'-Dichlorobenzidine	ND	* UJ	10	2.7	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/17/19 10:30	07/20/19 15:37	1
Diethyl phthalate	ND		10	0.73	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,4-Dimethylphenol	ND		10	3.7	ug/L		07/17/19 10:30	07/20/19 15:37	1
Dimethyl phthalate	ND		10	0.63	ug/L		07/17/19 10:30	07/20/19 15:37	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/17/19 10:30	07/20/19 15:37	1
4,6-Dinitro-ortho-cresol	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,4-Dinitrophenol	ND		31	3.6	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
Di-n-octyl phthalate	ND	UJ	10	0.46	ug/L		07/17/19 10:30	07/20/19 15:37	1
1,4-Dioxane	ND	UJ	10	1.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	10	1.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
Hexachlorobenzene	ND		10	0.26	ug/L		07/17/19 10:30	07/20/19 15:37	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/17/19 10:30	07/20/19 15:37	1
Hexachloroethane	ND		10	4.4	ug/L		07/17/19 10:30	07/20/19 15:37	1
Indene	ND		10	1.0	ug/L		07/17/19 10:30	07/20/19 15:37	1
Isophorone	ND		10	0.60	ug/L		07/17/19 10:30	07/20/19 15:37	1
2-Methylphenol	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 15:37	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/17/19 10:30	07/20/19 15:37	1
2-Nitroaniline	ND		10	2.3	ug/L		07/17/19 10:30	07/20/19 15:37	1
3-Nitroaniline	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 15:37	1
4-Nitroaniline	ND		10	2.6	ug/L		07/17/19 10:30	07/20/19 15:37	1
Nitrobenzene	ND		10	0.58	ug/L		07/17/19 10:30	07/20/19 15:37	1
2-Nitrophenol	ND		10	0.68	ug/L		07/17/19 10:30	07/20/19 15:37	1
4-Nitrophenol	ND		10	2.2	ug/L		07/17/19 10:30	07/20/19 15:37	1
N-Nitrosodimethylamine	ND		10	3.7	ug/L		07/17/19 10:30	07/20/19 15:37	1

Client Sample ID: MW6A-ROX-071119
Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 15:37	1
N-Nitrosodiphenylamine	ND	UJ	10	0.49	ug/L		07/17/19 10:30	07/20/19 15:37	1
Pentachlorophenol	ND		21	1.9	ug/L		07/17/19 10:30	07/20/19 15:37	1
Phenol	ND	UJ	10	2.7	ug/L		07/17/19 10:30	07/20/19 15:37	1
Pyridine	ND	UJ	10	3.4	ug/L		07/17/19 10:30	07/20/19 15:37	1
Quinoline	ND		10	6.3	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,4,5-Trichlorophenol	ND		10	3.9	ug/L		07/17/19 10:30	07/20/19 15:37	1
2,4,6-Trichlorophenol	ND		10	3.7	ug/L		07/17/19 10:30	07/20/19 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*46*		*34 - 120*	*07/17/19 10:30*	*07/20/19 15:37*	*1*
2-Fluorophenol	*19*		*10 - 120*	*07/17/19 10:30*	*07/20/19 15:37*	*1*
Nitrobenzene-d5	*41*		*27 - 120*	*07/17/19 10:30*	*07/20/19 15:37*	*1*
Phenol-d5	*25*		*10 - 120*	*07/17/19 10:30*	*07/20/19 15:37*	*1*
Terphenyl-d14	*38*	*X*	*53 - 125*	*07/17/19 10:30*	*07/20/19 15:37*	*1*
2,4,6-Tribromophenol	*72*		*15 - 135*	*07/17/19 10:30*	*07/20/19 15:37*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0057	ug/L		07/22/19 13:44	07/22/19 22:41	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		07/22/19 13:44	07/22/19 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*		*51 - 149*	*07/22/19 13:44*	*07/22/19 22:41*	*1*

Client Sample ID: MW6B-ROX-071119
Date Collected: 07/11/19 10:05
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-3
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			07/17/19 19:24	1
Acrolein	ND		20	10	ug/L			07/17/19 19:24	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 19:24	1
Benzene	**0.44**	**J**	1.0	0.38	ug/L			07/17/19 19:24	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 19:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 19:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 19:24	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 19:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 19:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 19:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 19:24	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 19:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 19:24	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 19:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 19:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 19:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 19:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 19:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 19:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 19:24	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 19:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 19:24	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 19:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 19:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 19:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 19:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 19:24	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 19:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 19:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 19:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 19:24	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 19:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 19:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 19:24	1

Client Sample ID: MW6B-ROX-071119
Date Collected: 07/11/19 10:05
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-3
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			07/17/19 19:24	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 19:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 19:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 19:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 19:24	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 19:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 19:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 19:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 19:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 19:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 19:24	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 19:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 19:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 19:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 19:24	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 19:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 19:24	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/17/19 19:24*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*07/17/19 19:24*	*1*
Toluene-d8 (Surr)	*114*		*80 - 120*		*07/17/19 19:24*	*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		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
Acenaphthylene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
Anthracene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
Benzo[a]anthracene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:57	1
Chrysene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/20/19 12:57	1
Fluoranthene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
Fluorene	ND		0.21	0.022	ug/L		07/17/19 10:30	07/20/19 12:57	1
Phenanthrene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
Pyrene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
1-Methylnaphthalene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1
2-Methylnaphthalene	ND		0.21	0.021	ug/L		07/17/19 10:30	07/20/19 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*33 - 138*	*07/17/19 10:30*	*07/20/19 12:57*	*1*
2-Fluorobiphenyl	*63*		*15 - 122*	*07/17/19 10:30*	*07/20/19 12:57*	*1*
Nitrobenzene-d5	*60*		*19 - 130*	*07/17/19 10:30*	*07/20/19 12:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/24/19 21:58	1
Benzo[b]fluoranthene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/24/19 21:58	1

Client Sample ID: MW6B-ROX-071119
Date Collected: 07/11/19 10:05
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/24/19 21:58	1
Benzo[k]fluoranthene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/24/19 21:58	1
Dibenz(a,h)anthracene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/24/19 21:58	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.042	ug/L		07/17/19 10:30	07/24/19 21:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/17/19 10:30	07/20/19 15:58	1
Benzenethiol	ND	* UJ	10	1.8	ug/L		07/17/19 10:30	07/20/19 15:58	1
Benzoic acid	ND		31	7.6	ug/L		07/17/19 10:30	07/20/19 15:58	1
Benzyl alcohol	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 15:58	1
Bis(2-chloroethoxy)methane	ND		10	0.72	ug/L		07/17/19 10:30	07/20/19 15:58	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.77	ug/L		07/17/19 10:30	07/20/19 15:58	1
bis (2-chloroisopropyl) ether	ND		10	0.84	ug/L		07/17/19 10:30	07/20/19 15:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/17/19 10:30	07/20/19 15:58	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		07/17/19 10:30	07/20/19 15:58	1
Butyl benzyl phthalate	ND	UJ	10	0.72	ug/L		07/17/19 10:30	07/20/19 15:58	1
4-Chloroaniline	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 15:58	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/17/19 10:30	07/20/19 15:58	1
2-Chloronaphthalene	ND		10	0.54	ug/L		07/17/19 10:30	07/20/19 15:58	1
2-Chlorophenol	ND		10	2.3	ug/L		07/17/19 10:30	07/20/19 15:58	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 15:58	1
Dibenz[a,h]acridine	ND		10	3.1	ug/L		07/17/19 10:30	07/20/19 15:58	1
Dibenzofuran	ND		10	0.54	ug/L		07/17/19 10:30	07/20/19 15:58	1
3,3'-Dichlorobenzidine	ND	*	10	2.7	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/17/19 10:30	07/20/19 15:58	1
Diethyl phthalate	ND		10	0.73	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/17/19 10:30	07/20/19 15:58	1
Dimethyl phthalate	ND		10	0.62	ug/L		07/17/19 10:30	07/20/19 15:58	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/17/19 10:30	07/20/19 15:58	1
4,6-Dinitro-ortho-cresol	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 15:58	1
Di-n-octyl phthalate	ND		10	0.46	ug/L		07/17/19 10:30	07/20/19 15:58	1
1,4-Dioxane	ND	UJ	10	1.0	ug/L		07/17/19 10:30	07/20/19 15:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	10	1.0	ug/L		07/17/19 10:30	07/20/19 15:58	1
Hexachlorobenzene	ND		10	0.26	ug/L		07/17/19 10:30	07/20/19 15:58	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/17/19 10:30	07/20/19 15:58	1
Hexachloroethane	ND		10	4.4	ug/L		07/17/19 10:30	07/20/19 15:58	1
Indene	ND		10	1.0	ug/L		07/17/19 10:30	07/20/19 15:58	1
Isophorone	ND		10	0.59	ug/L		07/17/19 10:30	07/20/19 15:58	1
2-Methylphenol	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 15:58	1
3 & 4 Methylphenol	ND		21	1.1	ug/L		07/17/19 10:30	07/20/19 15:58	1
2-Nitroaniline	ND		10	2.3	ug/L		07/17/19 10:30	07/20/19 15:58	1
3-Nitroaniline	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 15:58	1
4-Nitroaniline	ND		10	2.6	ug/L		07/17/19 10:30	07/20/19 15:58	1
Nitrobenzene	ND		10	0.57	ug/L		07/17/19 10:30	07/20/19 15:58	1
2-Nitrophenol	ND		10	0.68	ug/L		07/17/19 10:30	07/20/19 15:58	1

Client Sample ID: MW6B-ROX-071119
Date Collected: 07/11/19 10:05
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		10	2.2	ug/L		07/17/19 10:30	07/20/19 15:58	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/17/19 10:30	07/20/19 15:58	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/17/19 10:30	07/20/19 15:58	1
N-Nitrosodiphenylamine	ND		10	0.49	ug/L		07/17/19 10:30	07/20/19 15:58	1
Pentachlorophenol	ND		21	1.9	ug/L		07/17/19 10:30	07/20/19 15:58	1
Phenol	ND	UJ	10	2.7	ug/L		07/17/19 10:30	07/20/19 15:58	1
Pyridine	ND	UJ	10	3.3	ug/L		07/17/19 10:30	07/20/19 15:58	1
Quinoline	ND		10	6.2	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/17/19 10:30	07/20/19 15:58	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/17/19 10:30	07/20/19 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*34 - 120*	*07/17/19 10:30*	*07/20/19 15:58*	*1*
2-Fluorophenol	*25*		*10 - 120*	*07/17/19 10:30*	*07/20/19 15:58*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*07/17/19 10:30*	*07/20/19 15:58*	*1*
Phenol-d5	*20*		*10 - 120*	*07/17/19 10:30*	*07/20/19 15:58*	*1*
Terphenyl-d14	*45*	X	*53 - 125*	*07/17/19 10:30*	*07/20/19 15:58*	*1*
2,4,6-Tribromophenol	*74*		*15 - 135*	*07/17/19 10:30*	*07/20/19 15:58*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0052	ug/L		07/22/19 13:44	07/23/19 00:11	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/22/19 13:44	07/23/19 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/22/19 13:44*	*07/23/19 00:11*	*1*

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

Job ID: 400-173038-1

Client Sample ID: MW6D-ROX-071119
Date Collected: 07/11/19 10:45
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-4
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			07/17/19 19:51	1
Acrolein	ND		20	10	ug/L			07/17/19 19:51	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 19:51	1
Benzene	**5.6**		1.0	0.38	ug/L			07/17/19 19:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 19:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 19:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 19:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 19:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 19:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 19:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 19:51	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 19:51	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 19:51	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 19:51	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 19:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 19:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 19:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 19:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 19:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 19:51	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 19:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 19:51	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 19:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 19:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 19:51	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 19:51	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 19:51	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 19:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 19:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 19:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 19:51	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 19:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 19:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 19:51	1

Client Sample ID: MW6D-ROX-071119
Date Collected: 07/11/19 10:45
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-4
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			07/17/19 19:51	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 19:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 19:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 19:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 19:51	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 19:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 19:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 19:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 19:51	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 19:51	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 19:51	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 19:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 19:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 19:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 19:51	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 19:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 19:51	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/17/19 19:51*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/17/19 19:51*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/17/19 19:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
Anthracene	**0.030**	**J**	0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Benzo[b]fluoranthene	**0.043**	**J**	0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Chrysene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Fluoranthene	**0.023**	**J**	0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
Fluorene	ND		0.20	0.021	ug/L		07/17/19 10:30	07/20/19 13:13	1
Indeno[1,2,3-cd]pyrene	**0.048**	**J**	0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:13	1
Phenanthrene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
Pyrene	**0.022**	**J**	0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*64*		*33 - 138*	*07/17/19 10:30*	*07/20/19 13:13*	*1*
2-Fluorobiphenyl	*50*		*15 - 122*	*07/17/19 10:30*	*07/20/19 13:13*	*1*

Client Sample ID: MW6D-ROX-071119
Date Collected: 07/11/19 10:45
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	49		19 - 130	07/17/19 10:30	07/20/19 13:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/17/19 10:30	07/20/19 16:20	1
Benzenethiol	ND	* UJ	10	1.7	ug/L		07/17/19 10:30	07/20/19 16:20	1
Benzoic acid	ND		30	7.3	ug/L		07/17/19 10:30	07/20/19 16:20	1
Benzyl alcohol	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/17/19 10:30	07/20/19 16:20	1
Bis(2-chloroethyl)ether	ND	UJ	10	0.74	ug/L		07/17/19 10:30	07/20/19 16:20	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/17/19 10:30	07/20/19 16:20	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/17/19 10:30	07/20/19 16:20	1
Butyl benzyl phthalate	ND	UJ	10	0.69	ug/L		07/17/19 10:30	07/20/19 16:20	1
4-Chloroaniline	ND		10	3.4	ug/L		07/17/19 10:30	07/20/19 16:20	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/17/19 10:30	07/20/19 16:20	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/17/19 10:30	07/20/19 16:20	1
2-Chlorophenol	ND		10	2.2	ug/L		07/17/19 10:30	07/20/19 16:20	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
Dibenzofuran	ND		10	0.52	ug/L		07/17/19 10:30	07/20/19 16:20	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
Diethyl phthalate	ND		10	0.70	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 16:20	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/17/19 10:30	07/20/19 16:20	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/17/19 10:30	07/20/19 16:20	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 16:20	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/17/19 10:30	07/20/19 16:20	1
1,4-Dioxane	ND	UJ	10	1.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	10	1.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/17/19 10:30	07/20/19 16:20	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/17/19 10:30	07/20/19 16:20	1
Hexachloroethane	ND		10	4.2	ug/L		07/17/19 10:30	07/20/19 16:20	1
Indene	ND		10	1.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
Isophorone	ND		10	0.57	ug/L		07/17/19 10:30	07/20/19 16:20	1
2-Methylphenol	ND		10	1.8	ug/L		07/17/19 10:30	07/20/19 16:20	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
2-Nitroaniline	ND		10	2.2	ug/L		07/17/19 10:30	07/20/19 16:20	1
3-Nitroaniline	ND		10	1.8	ug/L		07/17/19 10:30	07/20/19 16:20	1
4-Nitroaniline	ND		10	2.5	ug/L		07/17/19 10:30	07/20/19 16:20	1
Nitrobenzene	ND		10	0.55	ug/L		07/17/19 10:30	07/20/19 16:20	1
2-Nitrophenol	ND		10	0.65	ug/L		07/17/19 10:30	07/20/19 16:20	1
4-Nitrophenol	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 16:20	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 16:20	1

Client Sample ID: MW6D-ROX-071119
Date Collected: 07/11/19 10:45
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/17/19 10:30	07/20/19 16:20	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/17/19 10:30	07/20/19 16:20	1
Pentachlorophenol	ND		20	1.8	ug/L		07/17/19 10:30	07/20/19 16:20	1
Phenol	ND	UJ	10	2.6	ug/L		07/17/19 10:30	07/20/19 16:20	1
Pyridine	ND	UJ	10	3.2	ug/L		07/17/19 10:30	07/20/19 16:20	1
Quinoline	ND		10	6.0	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/17/19 10:30	07/20/19 16:20	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*34 - 120*	*07/17/19 10:30*	*07/20/19 16:20*	*1*
2-Fluorophenol	*23*		*10 - 120*	*07/17/19 10:30*	*07/20/19 16:20*	*1*
Nitrobenzene-d5	*36*		*27 - 120*	*07/17/19 10:30*	*07/20/19 16:20*	*1*
Phenol-d5	*28*		*10 - 120*	*07/17/19 10:30*	*07/20/19 16:20*	*1*
Terphenyl-d14	*47*	*X*	*53 - 125*	*07/17/19 10:30*	*07/20/19 16:20*	*1*
2,4,6-Tribromophenol	*68*		*15 - 135*	*07/17/19 10:30*	*07/20/19 16:20*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		07/22/19 13:44	07/23/19 00:33	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/22/19 13:44	07/23/19 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*07/22/19 13:44*	*07/23/19 00:33*	*1*

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

Job ID: 400-173038-1

Client Sample ID: MW6C-ROX-071119
Date Collected: 07/11/19 11:35
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-5
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			07/17/19 20:17	1
Acrolein	ND		20	10	ug/L			07/17/19 20:17	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 20:17	1
Benzene	**0.75**	**J**	1.0	0.38	ug/L			07/17/19 20:17	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 20:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 20:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 20:17	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 20:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 20:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 20:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 20:17	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 20:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 20:17	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 20:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 20:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 20:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 20:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 20:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 20:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 20:17	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 20:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 20:17	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 20:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 20:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 20:17	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 20:17	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 20:17	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 20:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 20:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 20:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 20:17	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 20:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 20:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 20:17	1

Client Sample ID: MW6C-ROX-071119
Date Collected: 07/11/19 11:35
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-5
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			07/17/19 20:17	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 20:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 20:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 20:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 20:17	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 20:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 20:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 20:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 20:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 20:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 20:17	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 20:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 20:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 20:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 20:17	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 20:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 20:17	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/17/19 20:17*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*07/17/19 20:17*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/17/19 20:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
Anthracene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Chrysene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Fluoranthene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
Fluorene	ND		0.20	0.021	ug/L		07/17/19 10:30	07/20/19 13:30	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 13:30	1
Phenanthrene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
Pyrene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*33 - 138*	*07/17/19 10:30*	*07/20/19 13:30*	*1*
2-Fluorobiphenyl	*78*		*15 - 122*	*07/17/19 10:30*	*07/20/19 13:30*	*1*

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

Job ID: 400-173038-1

Client Sample ID: MW6C-ROX-071119
Date Collected: 07/11/19 11:35
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		19 - 130	07/17/19 10:30	07/20/19 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		07/17/19 10:30	07/20/19 16:41	1
Benzenethiol	ND	* UJ	9.9	1.7	ug/L		07/17/19 10:30	07/20/19 16:41	1
Benzoic acid	ND		30	7.2	ug/L		07/17/19 10:30	07/20/19 16:41	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		07/17/19 10:30	07/20/19 16:41	1
Bis(2-chloroethyl)ether	ND	UJ	9.9	0.73	ug/L		07/17/19 10:30	07/20/19 16:41	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		07/17/19 10:30	07/20/19 16:41	1
Bis(2-ethylhexyl) phthalate	**5.3**	**J**	9.9	5.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		07/17/19 10:30	07/20/19 16:41	1
Butyl benzyl phthalate	ND	UJ	9.9	0.68	ug/L		07/17/19 10:30	07/20/19 16:41	1
4-Chloroaniline	ND		9.9	3.4	ug/L		07/17/19 10:30	07/20/19 16:41	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/17/19 10:30	07/20/19 16:41	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		07/17/19 10:30	07/20/19 16:41	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/17/19 10:30	07/20/19 16:41	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
Dibenzofuran	ND		9.9	0.51	ug/L		07/17/19 10:30	07/20/19 16:41	1
3,3'-Dichlorobenzidine	ND	*	9.9	2.6	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
Diethyl phthalate	ND		9.9	0.69	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/17/19 10:30	07/20/19 16:41	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		07/17/19 10:30	07/20/19 16:41	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/17/19 10:30	07/20/19 16:41	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/17/19 10:30	07/20/19 16:41	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		07/17/19 10:30	07/20/19 16:41	1
1,4-Dioxane	ND	UJ	9.9	0.99	ug/L		07/17/19 10:30	07/20/19 16:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	9.9	0.99	ug/L		07/17/19 10:30	07/20/19 16:41	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		07/17/19 10:30	07/20/19 16:41	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/17/19 10:30	07/20/19 16:41	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/17/19 10:30	07/20/19 16:41	1
Indene	ND		9.9	0.99	ug/L		07/17/19 10:30	07/20/19 16:41	1
Isophorone	ND		9.9	0.56	ug/L		07/17/19 10:30	07/20/19 16:41	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/17/19 10:30	07/20/19 16:41	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/17/19 10:30	07/20/19 16:41	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/17/19 10:30	07/20/19 16:41	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/17/19 10:30	07/20/19 16:41	1
4-Nitroaniline	ND		9.9	2.5	ug/L		07/17/19 10:30	07/20/19 16:41	1
Nitrobenzene	ND		9.9	0.54	ug/L		07/17/19 10:30	07/20/19 16:41	1
2-Nitrophenol	ND		9.9	0.64	ug/L		07/17/19 10:30	07/20/19 16:41	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/17/19 10:30	07/20/19 16:41	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/17/19 10:30	07/20/19 16:41	1

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

Job ID: 400-173038-1

Client Sample ID: MW6C-ROX-071119
Date Collected: 07/11/19 11:35
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		07/17/19 10:30	07/20/19 16:41	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		07/17/19 10:30	07/20/19 16:41	1
Pentachlorophenol	ND		20	1.8	ug/L		07/17/19 10:30	07/20/19 16:41	1
Phenol	ND	UJ	9.9	2.6	ug/L		07/17/19 10:30	07/20/19 16:41	1
Pyridine	ND	UJ	9.9	3.2	ug/L		07/17/19 10:30	07/20/19 16:41	1
Quinoline	ND		9.9	5.9	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/17/19 10:30	07/20/19 16:41	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/17/19 10:30	07/20/19 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*34 - 120*	*07/17/19 10:30*	*07/20/19 16:41*	*1*
2-Fluorophenol	*35*		*10 - 120*	*07/17/19 10:30*	*07/20/19 16:41*	*1*
Nitrobenzene-d5	*41*		*27 - 120*	*07/17/19 10:30*	*07/20/19 16:41*	*1*
Phenol-d5	*35*		*10 - 120*	*07/17/19 10:30*	*07/20/19 16:41*	*1*
Terphenyl-d14	*48*	X	*53 - 125*	*07/17/19 10:30*	*07/20/19 16:41*	*1*
2,4,6-Tribromophenol	*73*		*15 - 135*	*07/17/19 10:30*	*07/20/19 16:41*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0056	ug/L		07/22/19 13:44	07/23/19 00:56	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/22/19 13:44	07/23/19 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/22/19 13:44*	*07/23/19 00:56*	*1*

Client Sample ID: MW1-ROX-071119-EB
Date Collected: 07/11/19 12:02
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-6
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			07/17/19 20:43	1
Acrolein	ND		20	10	ug/L			07/17/19 20:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 20:43	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 20:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 20:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 20:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 20:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 20:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 20:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 20:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 20:43	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 20:43	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 20:43	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 20:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 20:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 20:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 20:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 20:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 20:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 20:43	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 20:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 20:43	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 20:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 20:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 20:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 20:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 20:43	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 20:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 20:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 20:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 20:43	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 20:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 20:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 20:43	1

Client Sample ID: MW1-ROX-071119-EB
Date Collected: 07/11/19 12:02
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-6
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			07/17/19 20:43	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 20:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 20:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 20:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 20:43	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 20:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 20:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 20:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 20:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 20:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 20:43	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 20:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 20:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 20:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 20:43	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 20:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 20:43	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/17/19 20:43*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*07/17/19 20:43*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/17/19 20:43*	*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		07/17/19 10:30	07/20/19 13:46	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Chrysene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 10:30	07/20/19 13:46	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		07/17/19 10:30	07/20/19 13:46	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*118*		*33 - 138*	*07/17/19 10:30*	*07/20/19 13:46*	*1*
2-Fluorobiphenyl	*79*		*15 - 122*	*07/17/19 10:30*	*07/20/19 13:46*	*1*

Client Sample ID: MW1-ROX-071119-EB
Date Collected: 07/11/19 12:02
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		19 - 130	07/17/19 10:30	07/20/19 13:46	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		07/17/19 10:30	07/20/19 17:03	1
Benzenethiol	ND	*	9.7	1.6	ug/L		07/17/19 10:30	07/20/19 17:03	1
Benzoic acid	ND		29	7.1	ug/L		07/17/19 10:30	07/20/19 17:03	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/17/19 10:30	07/20/19 17:03	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/17/19 10:30	07/20/19 17:03	1
Bis(2-chloroethyl)ether	ND		9.7	0.71	ug/L		07/17/19 10:30	07/20/19 17:03	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		07/17/19 10:30	07/20/19 17:03	1
Bis(2-ethylhexyl) phthalate	17		9.7	4.8	ug/L		07/17/19 10:30	07/20/19 17:03	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/17/19 10:30	07/20/19 17:03	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/17/19 10:30	07/20/19 17:03	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/17/19 10:30	07/20/19 17:03	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/17/19 10:30	07/20/19 17:03	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		07/17/19 10:30	07/20/19 17:03	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/17/19 10:30	07/20/19 17:03	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/17/19 10:30	07/20/19 17:03	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		07/17/19 10:30	07/20/19 17:03	1
Dibenzofuran	ND		9.7	0.50	ug/L		07/17/19 10:30	07/20/19 17:03	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/17/19 10:30	07/20/19 17:03	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/17/19 10:30	07/20/19 17:03	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/17/19 10:30	07/20/19 17:03	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/17/19 10:30	07/20/19 17:03	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/17/19 10:30	07/20/19 17:03	1
Di-n-octyl phthalate	ND		9.7	0.42	ug/L		07/17/19 10:30	07/20/19 17:03	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/17/19 10:30	07/20/19 17:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/17/19 10:30	07/20/19 17:03	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/17/19 10:30	07/20/19 17:03	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 10:30	07/20/19 17:03	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/17/19 10:30	07/20/19 17:03	1
Indene	ND		9.7	0.97	ug/L		07/17/19 10:30	07/20/19 17:03	1
Isophorone	ND		9.7	0.55	ug/L		07/17/19 10:30	07/20/19 17:03	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/17/19 10:30	07/20/19 17:03	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 10:30	07/20/19 17:03	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/17/19 10:30	07/20/19 17:03	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/17/19 10:30	07/20/19 17:03	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/17/19 10:30	07/20/19 17:03	1
Nitrobenzene	ND		9.7	0.53	ug/L		07/17/19 10:30	07/20/19 17:03	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/17/19 10:30	07/20/19 17:03	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/17/19 10:30	07/20/19 17:03	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/17/19 10:30	07/20/19 17:03	1

Client Sample ID: MW1-ROX-071119-EB
Date Collected: 07/11/19 12:02
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-6
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		9.7	3.2	ug/L		07/17/19 10:30	07/20/19 17:03	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		07/17/19 10:30	07/20/19 17:03	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 10:30	07/20/19 17:03	1
Phenol	ND		9.7	2.5	ug/L		07/17/19 10:30	07/20/19 17:03	1
Pyridine	ND		9.7	3.1	ug/L		07/17/19 10:30	07/20/19 17:03	1
Quinoline	ND		9.7	5.8	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/17/19 10:30	07/20/19 17:03	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/17/19 10:30	07/20/19 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*07/17/19 10:30*	*07/20/19 17:03*	*1*
2-Fluorophenol	*41*		*10 - 120*	*07/17/19 10:30*	*07/20/19 17:03*	*1*
Nitrobenzene-d5	*46*		*27 - 120*	*07/17/19 10:30*	*07/20/19 17:03*	*1*
Phenol-d5	*42*		*10 - 120*	*07/17/19 10:30*	*07/20/19 17:03*	*1*
Terphenyl-d14	*67*		*53 - 125*	*07/17/19 10:30*	*07/20/19 17:03*	*1*
2,4,6-Tribromophenol	*88*		*15 - 135*	*07/17/19 10:30*	*07/20/19 17:03*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		07/22/19 13:44	07/23/19 01:18	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 13:44	07/23/19 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/22/19 13:44*	*07/23/19 01:18*	*1*

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

Job ID: 400-173038-1

Client Sample ID: MW1-ROX-071119
Date Collected: 07/11/19 13:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-7
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			07/17/19 21:10	1
Acrolein	ND		20	10	ug/L			07/17/19 21:10	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 21:10	1
Benzene	**0.44**	**J**	1.0	0.38	ug/L			07/17/19 21:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 21:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 21:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 21:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 21:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 21:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 21:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 21:10	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 21:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 21:10	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 21:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 21:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 21:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 21:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 21:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 21:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 21:10	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 21:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 21:10	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 21:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 21:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 21:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 21:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 21:10	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 21:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 21:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 21:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 21:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 21:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 21:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 21:10	1

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

Job ID: 400-173038-1

Client Sample ID: MW1-ROX-071119
Date Collected: 07/11/19 13:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-7
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			07/17/19 21:10	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 21:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 21:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 21:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 21:10	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 21:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 21:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 21:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 21:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 21:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 21:10	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 21:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 21:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 21:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 21:10	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 21:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 21:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/17/19 21:10*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/17/19 21:10*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/17/19 21:10*	*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		07/17/19 10:30	07/20/19 14:02	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Chrysene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 10:30	07/20/19 14:02	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:02	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*30*	*X*	*33 - 138*	*07/17/19 10:30*	*07/20/19 14:02*	*1*
2-Fluorobiphenyl	*48*		*15 - 122*	*07/17/19 10:30*	*07/20/19 14:02*	*1*

Client Sample ID: MW1-ROX-071119
Date Collected: 07/11/19 13:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	46		19 - 130	07/17/19 10:30	07/20/19 14:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		07/17/19 10:30	07/20/19 17:24	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		07/17/19 10:30	07/20/19 17:24	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 10:30	07/20/19 17:24	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 10:30	07/20/19 17:24	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/17/19 10:30	07/20/19 17:24	1
Bis(2-chloroethyl)ether	ND	UJ	9.6	0.71	ug/L		07/17/19 10:30	07/20/19 17:24	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/17/19 10:30	07/20/19 17:24	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/17/19 10:30	07/20/19 17:24	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 10:30	07/20/19 17:24	1
Butyl benzyl phthalate	ND	UJ	9.6	0.66	ug/L		07/17/19 10:30	07/20/19 17:24	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 10:30	07/20/19 17:24	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/17/19 10:30	07/20/19 17:24	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 10:30	07/20/19 17:24	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 10:30	07/20/19 17:24	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 10:30	07/20/19 17:24	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/17/19 10:30	07/20/19 17:24	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/17/19 10:30	07/20/19 17:24	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 10:30	07/20/19 17:24	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/17/19 10:30	07/20/19 17:24	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/17/19 10:30	07/20/19 17:24	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 10:30	07/20/19 17:24	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 10:30	07/20/19 17:24	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/17/19 10:30	07/20/19 17:24	1
1,4-Dioxane	ND	UJ	9.6	0.96	ug/L		07/17/19 10:30	07/20/19 17:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	9.6	0.96	ug/L		07/17/19 10:30	07/20/19 17:24	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 10:30	07/20/19 17:24	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 10:30	07/20/19 17:24	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 10:30	07/20/19 17:24	1
Indene	ND		9.6	0.96	ug/L		07/17/19 10:30	07/20/19 17:24	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 10:30	07/20/19 17:24	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 10:30	07/20/19 17:24	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 10:30	07/20/19 17:24	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 10:30	07/20/19 17:24	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 10:30	07/20/19 17:24	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 10:30	07/20/19 17:24	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 10:30	07/20/19 17:24	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/17/19 10:30	07/20/19 17:24	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 10:30	07/20/19 17:24	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/17/19 10:30	07/20/19 17:24	1

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

Job ID: 400-173038-1

Client Sample ID: MW1-ROX-071119
Date Collected: 07/11/19 13:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-7
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		07/17/19 10:30	07/20/19 17:24	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 10:30	07/20/19 17:24	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 10:30	07/20/19 17:24	1
Phenol	ND	U5	9.6	2.5	ug/L		07/17/19 10:30	07/20/19 17:24	1
Pyridine	ND	U5	9.6	3.1	ug/L		07/17/19 10:30	07/20/19 17:24	1
Quinoline	ND		9.6	5.8	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/17/19 10:30	07/20/19 17:24	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/17/19 10:30	07/20/19 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*38*		*34 - 120*	*07/17/19 10:30*	*07/20/19 17:24*	*1*
2-Fluorophenol	*18*		*10 - 120*	*07/17/19 10:30*	*07/20/19 17:24*	*1*
Nitrobenzene-d5	*32*		*27 - 120*	*07/17/19 10:30*	*07/20/19 17:24*	*1*
Phenol-d5	*16*		*10 - 120*	*07/17/19 10:30*	*07/20/19 17:24*	*1*
Terphenyl-d14	*21*	*X*	*53 - 125*	*07/17/19 10:30*	*07/20/19 17:24*	*1*
2,4,6-Tribromophenol	*40*		*15 - 135*	*07/17/19 10:30*	*07/20/19 17:24*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		07/22/19 13:44	07/23/19 01:41	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		07/22/19 13:44	07/23/19 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/22/19 13:44*	*07/23/19 01:41*	*1*

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

Job ID: 400-173038-1

Client Sample ID: ROST3MW-ROX-071119
Date Collected: 07/11/19 14:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-8
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			07/17/19 21:36	1
Acrolein	ND		20	10	ug/L			07/17/19 21:36	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 21:36	1
Benzene	**8.1**		1.0	0.38	ug/L			07/17/19 21:36	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 21:36	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 21:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 21:36	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 21:36	1
2-Butanone (MEK)	**3.4**	**J**	25	2.6	ug/L			07/17/19 21:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 21:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 21:36	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 21:36	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 21:36	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 21:36	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 21:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 21:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 21:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 21:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Ethylbenzene	**15**		1.0	0.50	ug/L			07/17/19 21:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 21:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 21:36	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 21:36	1
Isopropylbenzene	**2.1**		1.0	0.53	ug/L			07/17/19 21:36	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 21:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 21:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 21:36	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 21:36	1
m-Xylene & p-Xylene	**40**		5.0	1.6	ug/L			07/17/19 21:36	1
Naphthalene	**4.5**		1.0	1.0	ug/L			07/17/19 21:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 21:36	1
N-Propylbenzene	**4.4**		1.0	0.69	ug/L			07/17/19 21:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 21:36	1
o-Xylene	**5.7**		5.0	0.60	ug/L			07/17/19 21:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 21:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 21:36	1

Client Sample ID: ROST3MW-ROX-071119
Date Collected: 07/11/19 14:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-8
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			07/17/19 21:36	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 21:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 21:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 21:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 21:36	1
Toluene	**2.1**		1.0	0.41	ug/L			07/17/19 21:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 21:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 21:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 21:36	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 21:36	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 21:36	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 21:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 21:36	1
1,2,4-Trimethylbenzene	**12**		1.0	0.82	ug/L			07/17/19 21:36	1
1,3,5-Trimethylbenzene	**2.6**		1.0	0.56	ug/L			07/17/19 21:36	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 21:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 21:36	1
Xylenes, Total	**46**		10	1.6	ug/L			07/17/19 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*07/17/19 21:36*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/17/19 21:36*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/17/19 21:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.26**		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Chrysene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
Fluorene	**0.12**	**J**	0.19	0.020	ug/L		07/17/19 10:30	07/20/19 14:18	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/17/19 10:30	07/20/19 14:18	1
Phenanthrene	**0.15**	**J**	0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
1-Methylnaphthalene	**3.6**		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1
2-Methylnaphthalene	**1.4**		0.19	0.019	ug/L		07/17/19 10:30	07/20/19 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*33 - 138*	*07/17/19 10:30*	*07/20/19 14:18*	*1*
2-Fluorobiphenyl	*60*		*15 - 122*	*07/17/19 10:30*	*07/20/19 14:18*	*1*

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

Job ID: 400-173038-1

Client Sample ID: ROST3MW-ROX-071119
Date Collected: 07/11/19 14:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	60		19 - 130	07/17/19 10:30	07/20/19 14:18	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		07/17/19 10:30	07/20/19 17:46	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		07/17/19 10:30	07/20/19 17:46	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 10:30	07/20/19 17:46	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 10:30	07/20/19 17:46	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/17/19 10:30	07/20/19 17:46	1
Bis(2-chloroethyl)ether	ND	UJ	9.6	0.71	ug/L		07/17/19 10:30	07/20/19 17:46	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		07/17/19 10:30	07/20/19 17:46	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/17/19 10:30	07/20/19 17:46	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 10:30	07/20/19 17:46	1
Butyl benzyl phthalate	ND	UJ	9.6	0.66	ug/L		07/17/19 10:30	07/20/19 17:46	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 10:30	07/20/19 17:46	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/17/19 10:30	07/20/19 17:46	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 10:30	07/20/19 17:46	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 10:30	07/20/19 17:46	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 10:30	07/20/19 17:46	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/17/19 10:30	07/20/19 17:46	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/17/19 10:30	07/20/19 17:46	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 10:30	07/20/19 17:46	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		07/17/19 10:30	07/20/19 17:46	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		07/17/19 10:30	07/20/19 17:46	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 10:30	07/20/19 17:46	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 10:30	07/20/19 17:46	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/17/19 10:30	07/20/19 17:46	1
1,4-Dioxane	ND	UJ	9.6	0.96	ug/L		07/17/19 10:30	07/20/19 17:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	9.6	0.96	ug/L		07/17/19 10:30	07/20/19 17:46	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 10:30	07/20/19 17:46	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 10:30	07/20/19 17:46	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 10:30	07/20/19 17:46	1
Indene	ND		9.6	0.96	ug/L		07/17/19 10:30	07/20/19 17:46	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 10:30	07/20/19 17:46	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 10:30	07/20/19 17:46	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 10:30	07/20/19 17:46	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 10:30	07/20/19 17:46	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 10:30	07/20/19 17:46	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 10:30	07/20/19 17:46	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 10:30	07/20/19 17:46	1
2-Nitrophenol	ND		9.6	0.62	ug/L		07/17/19 10:30	07/20/19 17:46	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 10:30	07/20/19 17:46	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/17/19 10:30	07/20/19 17:46	1

Client Sample ID: ROST3MW-ROX-071119
Date Collected: 07/11/19 14:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-8
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		07/17/19 10:30	07/20/19 17:46	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 10:30	07/20/19 17:46	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 10:30	07/20/19 17:46	1
Phenol	ND		9.6	2.5	ug/L		07/17/19 10:30	07/20/19 17:46	1
Pyridine	ND		9.6	3.1	ug/L		07/17/19 10:30	07/20/19 17:46	1
Quinoline	ND		9.6	5.7	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/17/19 10:30	07/20/19 17:46	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/17/19 10:30	07/20/19 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*41*		*34 - 120*	*07/17/19 10:30*	*07/20/19 17:46*	*1*
2-Fluorophenol	*32*		*10 - 120*	*07/17/19 10:30*	*07/20/19 17:46*	*1*
Nitrobenzene-d5	*38*		*27 - 120*	*07/17/19 10:30*	*07/20/19 17:46*	*1*
Phenol-d5	*28*		*10 - 120*	*07/17/19 10:30*	*07/20/19 17:46*	*1*
Terphenyl-d14	*39*	*X*	*53 - 125*	*07/17/19 10:30*	*07/20/19 17:46*	*1*
2,4,6-Tribromophenol	*75*		*15 - 135*	*07/17/19 10:30*	*07/20/19 17:46*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		07/22/19 13:44	07/23/19 02:03	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/22/19 13:44	07/23/19 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/22/19 13:44*	*07/23/19 02:03*	*1*

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

Job ID: 400-173038-1

Client Sample ID: TB-ROX-071119-8011
Date Collected: 07/11/19 00:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-9
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		07/22/19 13:44	07/23/19 02:26	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 13:44	07/23/19 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/22/19 13:44*	*07/23/19 02:26*	*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.
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

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: 400-173038-1

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)
400-173038-1	TB-ROX-071119-8260	110	96	109
400-173038-2	MW6A-ROX-071119	109	97	109
400-173038-2 MS	MW6A-ROX-071119	106	99	97
400-173038-2 MSD	MW6A-ROX-071119	107	97	98
400-173038-3	MW6B-ROX-071119	110	97	114
400-173038-4	MW6D-ROX-071119	112	96	106
400-173038-5	MW6C-ROX-071119	115	101	104
400-173038-6	MW1-ROX-071119-EB	112	100	104
400-173038-7	MW1-ROX-071119	110	99	108
400-173038-8	ROST3MW-ROX-071119	108	98	106
LCS 400-448412/1002	Lab Control Sample	110	96	99
MB 400-448412/5	Method Blank	111	98	106

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)
400-173038-2	MW6A-ROX-071119	46	19	41	25	38 X	72
400-173038-2 MS	MW6A-ROX-071119	56	35	53	40	45 X	88
400-173038-2 MSD	MW6A-ROX-071119	52	35	49	39	44 X	85
400-173038-3	MW6B-ROX-071119	48	25	43	20	45 X	74
400-173038-4	MW6D-ROX-071119	47	23	36	28	47 X	68
400-173038-5	MW6C-ROX-071119	48	35	41	35	48 X	73
400-173038-6	MW1-ROX-071119-EB	58	41	46	42	67	88
400-173038-7	MW1-ROX-071119	38	18	32	16	21 X	40
400-173038-8	ROST3MW-ROX-071119	41	32	38	28	39 X	75
LCS 400-448378/26-A	Lab Control Sample	41	21	36	28	48 X	35
LCS 400-448378/2-A	Lab Control Sample	69	37	51	47	76	121
LCSD 400-448378/27-A	Lab Control Sample Dup	48	30	38	35	55	57
MB 400-448378/1-A	Method Blank	45	32	37	32	49 X	55

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-173038-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-173038-2	MW6A-ROX-071119	55	57	56
400-173038-2 MS	MW6A-ROX-071119	99	109	100
400-173038-2 MSD	MW6A-ROX-071119	73	79	75
400-173038-3	MW6B-ROX-071119	68	63	60
400-173038-4	MW6D-ROX-071119	64	50	49
400-173038-5	MW6C-ROX-071119	94	78	73
400-173038-6	MW1-ROX-071119-EB	118	79	71
400-173038-7	MW1-ROX-071119	30 X	48	46
400-173038-8	ROST3MW-ROX-071119	69	60	60
LCS 400-448378/2-A	Lab Control Sample	89	68	68
MB 400-448378/1-A	Method Blank	79	54	56

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)
400-173038-2	MW6A-ROX-071119	122
400-173038-2 MS	MW6A-ROX-071119	88
400-173038-2 MSD	MW6A-ROX-071119	76
400-173038-3	MW6B-ROX-071119	92
400-173038-4	MW6D-ROX-071119	97
400-173038-5	MW6C-ROX-071119	101
400-173038-6	MW1-ROX-071119-EB	94
400-173038-7	MW1-ROX-071119	96
400-173038-8	ROST3MW-ROX-071119	101
400-173038-9	TB-ROX-071119-8011	96
LCS 400-448993/2-A	Lab Control Sample	86
MB 400-448993/1-A	Method Blank	90

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-173038-1

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-071119-8260

Date Collected: 07/11/19 00:00
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 18:58	AMB	TAL PEN

Client Sample ID: MW6A-ROX-071119

Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 17:10	AMB	TAL PEN
Total/NA	Prep	3520C			954.4 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 15:37	S1S	TAL PEN
Total/NA	Prep	3520C			954.4 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 12:40	VC1	TAL PEN
Total/NA	Prep	8011			33.8 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 22:41	DS	TAL PEN

Client Sample ID: MW6B-ROX-071119

Date Collected: 07/11/19 10:05
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 19:24	AMB	TAL PEN
Total/NA	Prep	3520C			962.6 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 15:58	S1S	TAL PEN
Total/NA	Prep	3520C			962.6 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 12:57	VC1	TAL PEN
Total/NA	Prep	3520C	RA		962.6 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			449423	07/24/19 21:58	PP1	TAL PEN
Total/NA	Prep	8011			36.7 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 00:11	DS	TAL PEN

Client Sample ID: MW6D-ROX-071119

Date Collected: 07/11/19 10:45
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-4
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	448412	07/17/19 19:51	AMB	TAL PEN
Total/NA	Prep	3520C			1003.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 16:20	S1S	TAL PEN
Total/NA	Prep	3520C			1003.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 13:13	VC1	TAL PEN
Total/NA	Prep	8011			36.3 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 00:33	DS	TAL PEN

Client Sample ID: MW6C-ROX-071119

Lab Sample ID: 400-173038-5

Date Collected: 07/11/19 11:35
Matrix: Water
Date Received: 07/12/19 09:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 20:17	AMB	TAL PEN
Total/NA	Prep	3520C			1009.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 16:41	S1S	TAL PEN
Total/NA	Prep	3520C			1009.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 13:30	VC1	TAL PEN
Total/NA	Prep	8011			34.2 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 00:56	DS	TAL PEN

Client Sample ID: MW1-ROX-071119-EB

Lab Sample ID: 400-173038-6

Date Collected: 07/11/19 12:02
Matrix: Water
Date Received: 07/12/19 09:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 20:43	AMB	TAL PEN
Total/NA	Prep	3520C			1035.4 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 17:03	S1S	TAL PEN
Total/NA	Prep	3520C			1035.4 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 13:46	VC1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 01:18	DS	TAL PEN

Client Sample ID: MW1-ROX-071119

Lab Sample ID: 400-173038-7

Date Collected: 07/11/19 13:15
Matrix: Water
Date Received: 07/12/19 09:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 21:10	AMB	TAL PEN
Total/NA	Prep	3520C			1039.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 17:24	S1S	TAL PEN
Total/NA	Prep	3520C			1039.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 14:02	VC1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 01:41	DS	TAL PEN

Client Sample ID: ROST3MW-ROX-071119

Lab Sample ID: 400-173038-8

Date Collected: 07/11/19 14:00
Matrix: Water
Date Received: 07/12/19 09:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 21:36	AMB	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 17:46	S1S	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 14:18	VC1	TAL PEN

Client Sample ID: ROST3MW-ROX-071119 — **Lab Sample ID: 400-173038-8**
Date Collected: 07/11/19 14:00 — **Matrix: Water**
Date Received: 07/12/19 09:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.4 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 02:03	DS	TAL PEN

Client Sample ID: TB-ROX-071119-8011 — **Lab Sample ID: 400-173038-9**
Date Collected: 07/11/19 00:00 — **Matrix: Water**
Date Received: 07/12/19 09:19

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	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 02:26	DS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-448378/1-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	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 13:29	S1S	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			448806	07/20/19 11:36	VC1	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-448412/5**
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	448412	07/17/19 16:44	AMB	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-448993/1-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	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 20:02	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448378/26-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	448378	07/17/19 10:53	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 13:50	S1S	TAL PEN

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

Lab Sample ID: LCS 400-448378/2-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	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 04:45	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			449815	07/28/19 18:23	KJA	TAL PEN

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

Lab Sample ID: LCS 400-448412/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448412	07/17/19 15:27	AMB	TAL PEN

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

Lab Sample ID: LCS 400-448993/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 20:24	DS	TAL PEN

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

Lab Sample ID: LCSD 400-448378/27-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	448378	07/17/19 10:53	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 14:11	S1S	TAL PEN

Client Sample ID: MW6A-ROX-071119
Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2 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	448412	07/17/19 17:37	AMB	TAL PEN
Total/NA	Prep	3520C			994.4 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 14:54	S1S	TAL PEN
Total/NA	Prep	3520C			994.4 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			448806	07/20/19 12:07	VC1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 23:03	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-173038-1

Client Sample ID: MW6A-ROX-071119
Date Collected: 07/11/19 09:15
Date Received: 07/12/19 09:19

Lab Sample ID: 400-173038-2 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	448412	07/17/19 18:05	AMB	TAL PEN
Total/NA	Prep	3520C			964.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 15:16	S1S	TAL PEN
Total/NA	Prep	3520C			964.8 mL	1 mL	448378	07/17/19 10:30	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			448806	07/20/19 12:24	VC1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 23:26	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: 448412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-1	TB-ROX-071119-8260	Total/NA	Water	8260B	
400-173038-2	MW6A-ROX-071119	Total/NA	Water	8260B	
400-173038-3	MW6B-ROX-071119	Total/NA	Water	8260B	
400-173038-4	MW6D-ROX-071119	Total/NA	Water	8260B	
400-173038-5	MW6C-ROX-071119	Total/NA	Water	8260B	
400-173038-6	MW1-ROX-071119-EB	Total/NA	Water	8260B	
400-173038-7	MW1-ROX-071119	Total/NA	Water	8260B	
400-173038-8	ROST3MW-ROX-071119	Total/NA	Water	8260B	
MB 400-448412/5	Method Blank	Total/NA	Water	8260B	
LCS 400-448412/1002	Lab Control Sample	Total/NA	Water	8260B	
400-173038-2 MS	MW6A-ROX-071119	Total/NA	Water	8260B	
400-173038-2 MSD	MW6A-ROX-071119	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 448378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-2	MW6A-ROX-071119	Total/NA	Water	3520C	
400-173038-3	MW6B-ROX-071119	Total/NA	Water	3520C	
400-173038-3 - RA	MW6B-ROX-071119	Total/NA	Water	3520C	
400-173038-4	MW6D-ROX-071119	Total/NA	Water	3520C	
400-173038-5	MW6C-ROX-071119	Total/NA	Water	3520C	
400-173038-6	MW1-ROX-071119-EB	Total/NA	Water	3520C	
400-173038-7	MW1-ROX-071119	Total/NA	Water	3520C	
400-173038-8	ROST3MW-ROX-071119	Total/NA	Water	3520C	
MB 400-448378/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-448378/26-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-448378/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-448378/27-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-173038-2 MS	MW6A-ROX-071119	Total/NA	Water	3520C	
400-173038-2 MSD	MW6A-ROX-071119	Total/NA	Water	3520C	

Analysis Batch: 448799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-2	MW6A-ROX-071119	Total/NA	Water	8270D	448378
400-173038-3	MW6B-ROX-071119	Total/NA	Water	8270D	448378
400-173038-4	MW6D-ROX-071119	Total/NA	Water	8270D	448378
400-173038-5	MW6C-ROX-071119	Total/NA	Water	8270D	448378
400-173038-6	MW1-ROX-071119-EB	Total/NA	Water	8270D	448378
400-173038-7	MW1-ROX-071119	Total/NA	Water	8270D	448378
400-173038-8	ROST3MW-ROX-071119	Total/NA	Water	8270D	448378
MB 400-448378/1-A	Method Blank	Total/NA	Water	8270D	448378
LCS 400-448378/26-A	Lab Control Sample	Total/NA	Water	8270D	448378
LCSD 400-448378/27-A	Lab Control Sample Dup	Total/NA	Water	8270D	448378
400-173038-2 MS	MW6A-ROX-071119	Total/NA	Water	8270D	448378
400-173038-2 MSD	MW6A-ROX-071119	Total/NA	Water	8270D	448378

Analysis Batch: 448806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-2	MW6A-ROX-071119	Total/NA	Water	8270D LL	448378
400-173038-3	MW6B-ROX-071119	Total/NA	Water	8270D LL	448378

GC/MS Semi VOA (Continued)

Analysis Batch: 448806 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-4	MW6D-ROX-071119	Total/NA	Water	8270D LL	448378
400-173038-5	MW6C-ROX-071119	Total/NA	Water	8270D LL	448378
400-173038-6	MW1-ROX-071119-EB	Total/NA	Water	8270D LL	448378
400-173038-7	MW1-ROX-071119	Total/NA	Water	8270D LL	448378
400-173038-8	ROST3MW-ROX-071119	Total/NA	Water	8270D LL	448378
MB 400-448378/1-A	Method Blank	Total/NA	Water	8270D LL	448378
400-173038-2 MS	MW6A-ROX-071119	Total/NA	Water	8270D LL	448378
400-173038-2 MSD	MW6A-ROX-071119	Total/NA	Water	8270D LL	448378

Analysis Batch: 449209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-448378/2-A	Lab Control Sample	Total/NA	Water	8270D	448378

Analysis Batch: 449423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-3 - RA	MW6B-ROX-071119	Total/NA	Water	8270D LL	448378

Analysis Batch: 449815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-448378/2-A	Lab Control Sample	Total/NA	Water	8270D LL	448378

GC Semi VOA

Prep Batch: 448993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-2	MW6A-ROX-071119	Total/NA	Water	8011	
400-173038-3	MW6B-ROX-071119	Total/NA	Water	8011	
400-173038-4	MW6D-ROX-071119	Total/NA	Water	8011	
400-173038-5	MW6C-ROX-071119	Total/NA	Water	8011	
400-173038-6	MW1-ROX-071119-EB	Total/NA	Water	8011	
400-173038-7	MW1-ROX-071119	Total/NA	Water	8011	
400-173038-8	ROST3MW-ROX-071119	Total/NA	Water	8011	
400-173038-9	TB-ROX-071119-8011	Total/NA	Water	8011	
MB 400-448993/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448993/2-A	Lab Control Sample	Total/NA	Water	8011	
400-173038-2 MS	MW6A-ROX-071119	Total/NA	Water	8011	
400-173038-2 MSD	MW6A-ROX-071119	Total/NA	Water	8011	

Analysis Batch: 449076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-2	MW6A-ROX-071119	Total/NA	Water	8011	448993
400-173038-3	MW6B-ROX-071119	Total/NA	Water	8011	448993
400-173038-4	MW6D-ROX-071119	Total/NA	Water	8011	448993
400-173038-5	MW6C-ROX-071119	Total/NA	Water	8011	448993
400-173038-6	MW1-ROX-071119-EB	Total/NA	Water	8011	448993
400-173038-7	MW1-ROX-071119	Total/NA	Water	8011	448993
400-173038-8	ROST3MW-ROX-071119	Total/NA	Water	8011	448993
400-173038-9	TB-ROX-071119-8011	Total/NA	Water	8011	448993
MB 400-448993/1-A	Method Blank	Total/NA	Water	8011	448993
LCS 400-448993/2-A	Lab Control Sample	Total/NA	Water	8011	448993
400-173038-2 MS	MW6A-ROX-071119	Total/NA	Water	8011	448993

GC Semi VOA (Continued)

Analysis Batch: 449076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173038-2 MSD	MW6A-ROX-071119	Total/NA	Water	8011	448993

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

Lab Sample ID: MB 400-448412/5
Matrix: Water
Analysis Batch: 448412

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/17/19 16:44	1
Acrolein	ND		20	10	ug/L			07/17/19 16:44	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/19 16:44	1
Benzene	ND		1.0	0.38	ug/L			07/17/19 16:44	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/19 16:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/19 16:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Bromoform	ND		5.0	0.71	ug/L			07/17/19 16:44	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/19 16:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/19 16:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/19 16:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/19 16:44	1
Chloroform	ND		1.0	0.60	ug/L			07/17/19 16:44	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/19 16:44	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/19 16:44	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 16:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/19 16:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/19 16:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/19 16:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/19 16:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/19 16:44	1
2-Hexanone	ND		25	3.1	ug/L			07/17/19 16:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/19 16:44	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/19 16:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/19 16:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/19 16:44	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/19 16:44	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/19 16:44	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/19 16:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/19 16:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/19 16:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/19 16:44	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/19 16:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/19 16:44	1

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

Lab Sample ID: MB 400-448412/5
Matrix: Water
Analysis Batch: 448412

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/19 16:44	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/19 16:44	1
Styrene	ND		1.0	1.0	ug/L			07/17/19 16:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/19 16:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/19 16:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/19 16:44	1
Toluene	ND		1.0	0.41	ug/L			07/17/19 16:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/19 16:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/19 16:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/19 16:44	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/19 16:44	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/19 16:44	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/19 16:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/19 16:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/19 16:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/19 16:44	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/19 16:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/19 16:44	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/19 16:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/17/19 16:44*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/17/19 16:44*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/17/19 16:44*	*1*

Lab Sample ID: LCS 400-448412/1002
Matrix: Water
Analysis Batch: 448412

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	237		ug/L		118	43 - 160
Acrolein	500	647		ug/L		129	38 - 160
Acrylonitrile	500	529		ug/L		106	64 - 142
Benzene	50.0	47.6		ug/L		95	70 - 130
Bromobenzene	50.0	49.2		ug/L		98	70 - 132
Bromochloromethane	50.0	43.4		ug/L		87	70 - 130
Bromodichloromethane	50.0	43.0		ug/L		86	67 - 133
Bromoform	50.0	47.7		ug/L		95	57 - 140
Bromomethane	50.0	27.6		ug/L		55	10 - 160
2-Butanone (MEK)	200	265		ug/L		132	61 - 145
Carbon disulfide	50.0	38.7		ug/L		77	61 - 137
Carbon tetrachloride	50.0	41.7		ug/L		83	61 - 137
Chlorobenzene	50.0	48.3		ug/L		97	70 - 130
Dibromochloromethane	50.0	47.5		ug/L		95	67 - 135
Chloroethane	50.0	43.3		ug/L		87	55 - 141

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

Lab Sample ID: LCS 400-448412/1002
Matrix: Water
Analysis Batch: 448412

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	30.6		ug/L		61	10 - 160
Chloroform	50.0	44.8		ug/L		90	69 - 130
1-Chlorohexane	50.0	42.0		ug/L		84	69 - 130
Chloromethane	50.0	50.8		ug/L		102	58 - 137
cis-1,2-Dichloroethene	50.0	46.5		ug/L		93	68 - 130
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	69 - 132
1,2-Dichlorobenzene	50.0	47.6		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	48.3		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	47.3		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	45.7		ug/L		91	70 - 130
1,2-Dichloroethane	50.0	46.0		ug/L		92	69 - 130
1,1-Dichloroethene	50.0	42.1		ug/L		84	63 - 134
1,2-Dichloropropane	50.0	46.9		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	49.8		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	40.3		ug/L		81	52 - 135
1,1-Dichloropropene	50.0	44.8		ug/L		90	70 - 130
Ethylbenzene	50.0	44.6		ug/L		89	70 - 130
Ethyl methacrylate	50.0	46.5		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	55.4		ug/L		111	53 - 140
2-Hexanone	200	224		ug/L		112	65 - 137
Isopropylbenzene	50.0	42.8		ug/L		86	70 - 130
Methylene bromide	50.0	46.0		ug/L		92	70 - 130
Methylene Chloride	50.0	50.6		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	192		ug/L		96	69 - 138
Methyl tert-butyl ether	50.0	45.3		ug/L		91	66 - 130
m-Xylene & p-Xylene	50.0	44.9		ug/L		90	70 - 130
Naphthalene	50.0	44.8		ug/L		90	47 - 149
n-Butylbenzene	50.0	47.1		ug/L		94	67 - 130
N-Propylbenzene	50.0	48.9		ug/L		98	70 - 130
o-Chlorotoluene	50.0	50.4		ug/L		101	70 - 130
o-Xylene	50.0	43.9		ug/L		88	70 - 130
p-Chlorotoluene	50.0	51.4		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	48.2		ug/L		96	65 - 130
sec-Butylbenzene	50.0	47.8		ug/L		96	66 - 130
Styrene	50.0	42.5		ug/L		85	70 - 130
tert-Butylbenzene	50.0	47.0		ug/L		94	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.9		ug/L		90	67 - 131
1,1,2,2-Tetrachloroethane	50.0	59.6		ug/L		119	70 - 131
Tetrachloroethene	50.0	41.4		ug/L		83	65 - 130
Toluene	50.0	46.7		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	45.5		ug/L		91	70 - 130
trans-1,3-Dichloropropene	50.0	44.3		ug/L		89	63 - 130
1,2,3-Trichlorobenzene	50.0	49.3		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	47.4		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	41.9		ug/L		84	68 - 130
1,1,2-Trichloroethane	50.0	49.9		ug/L		100	70 - 130
Trichloroethene	50.0	45.3		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	43.2		ug/L		86	65 - 138

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

Lab Sample ID: LCS 400-448412/1002
Matrix: Water
Analysis Batch: 448412

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	56.5		ug/L		113	70 - 130
1,2,4-Trimethylbenzene	50.0	50.6		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	50.0	51.2		ug/L		102	69 - 130
Vinyl acetate	100	97.1		ug/L		97	26 - 160
Vinyl chloride	50.0	51.3		ug/L		103	59 - 136
Xylenes, Total	100	88.8		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*78 - 118*
Dibromofluoromethane	*96*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 448412

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	87.4		ug/L		44	43 - 150
Acrolein	ND		500	521		ug/L		104	38 - 150
Acrylonitrile	ND		500	449		ug/L		90	62 - 149
Benzene	ND		50.0	45.5		ug/L		91	56 - 142
Bromobenzene	ND		50.0	43.2		ug/L		86	59 - 136
Bromochloromethane	ND		50.0	42.4		ug/L		85	64 - 140
Bromodichloromethane	ND		50.0	41.9		ug/L		84	59 - 143
Bromoform	ND		50.0	42.0		ug/L		84	50 - 140
Bromomethane	ND		50.0	26.7		ug/L		53	10 - 150
2-Butanone (MEK)	ND		200	151		ug/L		76	55 - 150
Carbon disulfide	ND		50.0	36.6		ug/L		73	48 - 150
Carbon tetrachloride	ND		50.0	39.5		ug/L		79	55 - 145
Chlorobenzene	ND		50.0	42.8		ug/L		86	64 - 130
Dibromochloromethane	ND		50.0	42.6		ug/L		85	56 - 143
Chloroethane	ND		50.0	40.7		ug/L		81	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	43.7		ug/L		87	60 - 141
1-Chlorohexane	ND		50.0	35.9		ug/L		72	56 - 136
Chloromethane	ND		50.0	44.4		ug/L		89	49 - 148
cis-1,2-Dichloroethene	ND		50.0	43.5		ug/L		87	59 - 143
cis-1,3-Dichloropropene	ND		50.0	42.1		ug/L		84	57 - 140
1,2-Dichlorobenzene	ND		50.0	41.3		ug/L		83	52 - 137
1,3-Dichlorobenzene	ND		50.0	40.8		ug/L		82	54 - 135
1,4-Dichlorobenzene	ND		50.0	40.5		ug/L		81	53 - 135
Dichlorodifluoromethane	ND		50.0	43.2		ug/L		86	16 - 150
1,1-Dichloroethane	ND		50.0	44.2		ug/L		88	61 - 144
1,2-Dichloroethane	ND		50.0	43.2		ug/L		86	60 - 141
1,1-Dichloroethene	ND		50.0	39.4		ug/L		79	54 - 147
1,2-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 137
1,3-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 133
2,2-Dichloropropane	ND		50.0	38.8		ug/L		78	42 - 144

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

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 448412

Client Sample ID: MW6A-ROX-071119
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	41.8		ug/L		84	65 - 136
Ethylbenzene	ND		50.0	38.5		ug/L		77	58 - 131
Ethyl methacrylate	ND		50.0	41.3		ug/L		83	64 - 130
Hexachlorobutadiene	ND		50.0	37.5		ug/L		75	31 - 149
2-Hexanone	ND		200	140		ug/L		70	65 - 140
Isopropylbenzene	ND		50.0	35.2		ug/L		70	56 - 133
Methylene bromide	ND		50.0	42.9		ug/L		86	63 - 138
Methylene Chloride	ND		50.0	48.8		ug/L		98	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	162		ug/L		81	63 - 146
Methyl tert-butyl ether	ND		50.0	41.5		ug/L		83	59 - 137
m-Xylene & p-Xylene	ND		50.0	38.8		ug/L		78	57 - 130
Naphthalene	ND		50.0	34.4		ug/L		69	25 - 150
n-Butylbenzene	ND		50.0	34.9		ug/L		70	41 - 142
N-Propylbenzene	ND		50.0	39.1		ug/L		78	51 - 138
o-Chlorotoluene	ND		50.0	43.6		ug/L		87	53 - 134
o-Xylene	ND		50.0	37.8		ug/L		76	61 - 130
p-Chlorotoluene	ND		50.0	42.3		ug/L		85	54 - 133
p-Isopropyltoluene	ND		50.0	37.2		ug/L		74	48 - 139
sec-Butylbenzene	ND		50.0	37.4		ug/L		75	50 - 138
Styrene	ND		50.0	36.9		ug/L		74	58 - 131
tert-Butylbenzene	ND		50.0	38.4		ug/L		77	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	41.2		ug/L		82	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	52.9		ug/L		106	66 - 135
Tetrachloroethene	ND		50.0	35.4		ug/L		71	52 - 133
Toluene	ND		50.0	41.9		ug/L		84	65 - 130
trans-1,2-Dichloroethene	ND		50.0	43.4		ug/L		87	61 - 143
trans-1,3-Dichloropropene	ND		50.0	39.7		ug/L		79	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	38.8		ug/L		78	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	36.8		ug/L		74	39 - 148
1,1,1-Trichloroethane	ND		50.0	40.5		ug/L		81	57 - 142
1,1,2-Trichloroethane	ND		50.0	45.9		ug/L		92	66 - 131
Trichloroethene	ND		50.0	41.7		ug/L		83	64 - 136
Trichlorofluoromethane	ND		50.0	39.9		ug/L		80	54 - 150
1,2,3-Trichloropropane	ND		50.0	49.0		ug/L		98	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	41.1		ug/L		82	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	40.7		ug/L		81	52 - 135
Vinyl acetate	ND		100	85.1		ug/L		85	26 - 150
Vinyl chloride	ND		50.0	45.7		ug/L		91	46 - 150
Xylenes, Total	ND		100	76.6		ug/L		77	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: 400-173038-2 MSD
Matrix: Water
Analysis Batch: 448412

Client Sample ID: MW6A-ROX-071119
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	91.1		ug/L		46	43 - 150	4	30
Acrolein	ND		500	564		ug/L		113	38 - 150	8	31
Acrylonitrile	ND		500	452		ug/L		90	62 - 149	1	30
Benzene	ND		50.0	46.0		ug/L		92	56 - 142	1	30
Bromobenzene	ND		50.0	45.8		ug/L		92	59 - 136	6	30
Bromochloromethane	ND		50.0	40.5		ug/L		81	64 - 140	5	30
Bromodichloromethane	ND		50.0	40.0		ug/L		80	59 - 143	5	30
Bromoform	ND		50.0	43.3		ug/L		87	50 - 140	3	30
Bromomethane	ND		50.0	29.9		ug/L		60	10 - 150	11	50
2-Butanone (MEK)	ND		200	152		ug/L		76	55 - 150	0	30
Carbon disulfide	ND		50.0	37.4		ug/L		75	48 - 150	2	30
Carbon tetrachloride	ND		50.0	39.8		ug/L		80	55 - 145	1	30
Chlorobenzene	ND		50.0	45.0		ug/L		90	64 - 130	5	30
Dibromochloromethane	ND		50.0	42.5		ug/L		85	56 - 143	0	30
Chloroethane	ND		50.0	42.1		ug/L		84	50 - 150	3	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	43.1		ug/L		86	60 - 141	1	30
1-Chlorohexane	ND		50.0	40.6		ug/L		81	56 - 136	12	30
Chloromethane	ND		50.0	48.8		ug/L		98	49 - 148	10	31
cis-1,2-Dichloroethene	ND		50.0	43.8		ug/L		88	59 - 143	1	30
cis-1,3-Dichloropropene	ND		50.0	42.0		ug/L		84	57 - 140	0	30
1,2-Dichlorobenzene	ND		50.0	43.6		ug/L		87	52 - 137	6	30
1,3-Dichlorobenzene	ND		50.0	43.7		ug/L		87	54 - 135	7	30
1,4-Dichlorobenzene	ND		50.0	43.6		ug/L		87	53 - 135	7	30
Dichlorodifluoromethane	ND		50.0	46.0		ug/L		92	16 - 150	6	31
1,1-Dichloroethane	ND		50.0	43.8		ug/L		88	61 - 144	1	30
1,2-Dichloroethane	ND		50.0	42.3		ug/L		85	60 - 141	2	30
1,1-Dichloroethene	ND		50.0	40.4		ug/L		81	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 137	0	30
1,3-Dichloropropane	ND		50.0	46.0		ug/L		92	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	38.8		ug/L		78	42 - 144	0	31
1,1-Dichloropropene	ND		50.0	42.0		ug/L		84	65 - 136	1	30
Ethylbenzene	ND		50.0	41.4		ug/L		83	58 - 131	7	30
Ethyl methacrylate	ND		50.0	42.9		ug/L		86	64 - 130	4	30
Hexachlorobutadiene	ND		50.0	47.8		ug/L		96	31 - 149	24	36
2-Hexanone	ND		200	144		ug/L		72	65 - 140	3	30
Isopropylbenzene	ND		50.0	40.2		ug/L		80	56 - 133	13	30
Methylene bromide	ND		50.0	42.2		ug/L		84	63 - 138	1	30
Methylene Chloride	ND		50.0	47.6		ug/L		95	60 - 146	3	32
4-Methyl-2-pentanone (MIBK)	ND		200	164		ug/L		82	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	42.6		ug/L		85	59 - 137	3	30
m-Xylene & p-Xylene	ND		50.0	42.7		ug/L		85	57 - 130	9	30
Naphthalene	ND		50.0	39.3		ug/L		79	25 - 150	13	30
n-Butylbenzene	ND		50.0	41.4		ug/L		83	41 - 142	17	31
N-Propylbenzene	ND		50.0	45.1		ug/L		90	51 - 138	14	30
o-Chlorotoluene	ND		50.0	47.2		ug/L		94	53 - 134	8	30
o-Xylene	ND		50.0	40.4		ug/L		81	61 - 130	7	30
p-Chlorotoluene	ND		50.0	46.0		ug/L		92	54 - 133	8	30

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

Lab Sample ID: 400-173038-2 MSD
Matrix: Water
Analysis Batch: 448412

Client Sample ID: MW6A-ROX-071119
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	44.4		ug/L		89	48 - 139	18	30
sec-Butylbenzene	ND		50.0	43.9		ug/L		88	50 - 138	16	30
Styrene	ND		50.0	39.6		ug/L		79	58 - 131	7	30
tert-Butylbenzene	ND		50.0	43.9		ug/L		88	54 - 146	13	30
1,1,1,2-Tetrachloroethane	ND		50.0	41.8		ug/L		84	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	53.7		ug/L		107	66 - 135	2	30
Tetrachloroethene	ND		50.0	37.8		ug/L		76	52 - 133	7	30
Toluene	ND		50.0	44.1		ug/L		88	65 - 130	5	30
trans-1,2-Dichloroethene	ND		50.0	43.1		ug/L		86	61 - 143	1	30
trans-1,3-Dichloropropene	ND		50.0	40.2		ug/L		80	53 - 133	1	30
1,2,3-Trichlorobenzene	ND		50.0	42.9		ug/L		86	43 - 145	10	30
1,2,4-Trichlorobenzene	ND		50.0	41.3		ug/L		83	39 - 148	11	30
1,1,1-Trichloroethane	ND		50.0	40.5		ug/L		81	57 - 142	0	30
1,1,2-Trichloroethane	ND		50.0	46.2		ug/L		92	66 - 131	1	30
Trichloroethene	ND		50.0	42.3		ug/L		85	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	43.0		ug/L		86	54 - 150	8	30
1,2,3-Trichloropropane	ND		50.0	51.0		ug/L		102	65 - 133	4	30
1,2,4-Trimethylbenzene	ND		50.0	45.8		ug/L		92	50 - 139	11	30
1,3,5-Trimethylbenzene	ND		50.0	46.9		ug/L		94	52 - 135	14	30
Vinyl acetate	ND		100	93.1		ug/L		93	26 - 150	9	33
Vinyl chloride	ND		50.0	50.9		ug/L		102	46 - 150	11	30
Xylenes, Total	ND		100	83.1		ug/L		83	59 - 130	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*78 - 118*
Dibromofluoromethane	*97*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 400-448378/1-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/17/19 10:30	07/20/19 13:29	1
Benzenethiol	ND		10	1.7	ug/L		07/17/19 10:30	07/20/19 13:29	1
Benzoic acid	ND		30	7.3	ug/L		07/17/19 10:30	07/20/19 13:29	1
Benzyl alcohol	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/17/19 10:30	07/20/19 13:29	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/17/19 10:30	07/20/19 13:29	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/17/19 10:30	07/20/19 13:29	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/17/19 10:30	07/20/19 13:29	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/17/19 10:30	07/20/19 13:29	1
4-Chloroaniline	ND		10	3.4	ug/L		07/17/19 10:30	07/20/19 13:29	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/17/19 10:30	07/20/19 13:29	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/17/19 10:30	07/20/19 13:29	1
2-Chlorophenol	ND		10	2.2	ug/L		07/17/19 10:30	07/20/19 13:29	1

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

Lab Sample ID: MB 400-448378/1-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
Dibenzofuran	ND		10	0.52	ug/L		07/17/19 10:30	07/20/19 13:29	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
Diethyl phthalate	ND		10	0.70	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 13:29	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/17/19 10:30	07/20/19 13:29	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/17/19 10:30	07/20/19 13:29	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 10:30	07/20/19 13:29	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/17/19 10:30	07/20/19 13:29	1
1,4-Dioxane	ND		10	1.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/17/19 10:30	07/20/19 13:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/17/19 10:30	07/20/19 13:29	1
Hexachloroethane	ND		10	4.2	ug/L		07/17/19 10:30	07/20/19 13:29	1
Indene	ND		10	1.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
Isophorone	ND		10	0.57	ug/L		07/17/19 10:30	07/20/19 13:29	1
2-Methylphenol	ND		10	1.8	ug/L		07/17/19 10:30	07/20/19 13:29	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
2-Nitroaniline	ND		10	2.2	ug/L		07/17/19 10:30	07/20/19 13:29	1
3-Nitroaniline	ND		10	1.8	ug/L		07/17/19 10:30	07/20/19 13:29	1
4-Nitroaniline	ND		10	2.5	ug/L		07/17/19 10:30	07/20/19 13:29	1
Nitrobenzene	ND		10	0.55	ug/L		07/17/19 10:30	07/20/19 13:29	1
2-Nitrophenol	ND		10	0.65	ug/L		07/17/19 10:30	07/20/19 13:29	1
4-Nitrophenol	ND		10	2.1	ug/L		07/17/19 10:30	07/20/19 13:29	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 13:29	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/17/19 10:30	07/20/19 13:29	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/17/19 10:30	07/20/19 13:29	1
Pentachlorophenol	ND		20	1.8	ug/L		07/17/19 10:30	07/20/19 13:29	1
Phenol	ND		10	2.6	ug/L		07/17/19 10:30	07/20/19 13:29	1
Pyridine	ND		10	3.2	ug/L		07/17/19 10:30	07/20/19 13:29	1
Quinoline	ND		10	6.0	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/17/19 10:30	07/20/19 13:29	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/17/19 10:30	07/20/19 13:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*		*34 - 120*	*07/17/19 10:30*	*07/20/19 13:29*	*1*
2-Fluorophenol	*32*		*10 - 120*	*07/17/19 10:30*	*07/20/19 13:29*	*1*
Nitrobenzene-d5	*37*		*27 - 120*	*07/17/19 10:30*	*07/20/19 13:29*	*1*
Phenol-d5	*32*		*10 - 120*	*07/17/19 10:30*	*07/20/19 13:29*	*1*
Terphenyl-d14	*49*	*X*	*53 - 125*	*07/17/19 10:30*	*07/20/19 13:29*	*1*
2,4,6-Tribromophenol	*55*		*15 - 135*	*07/17/19 10:30*	*07/20/19 13:29*	*1*

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

Lab Sample ID: LCS 400-448378/26-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		0.8	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*41*		*34 - 120*
2-Fluorophenol	*21*		*10 - 120*
Nitrobenzene-d5	*36*		*27 - 120*
Phenol-d5	*28*		*10 - 120*
Terphenyl-d14	*48*	*X*	*53 - 125*
2,4,6-Tribromophenol	*35*		*15 - 135*

Lab Sample ID: LCS 400-448378/2-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	17.3		ug/L		58	29 - 120
Benzoic acid	117	40.3		ug/L		35	10 - 150
Benzyl alcohol	30.0	20.4		ug/L		68	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.2		ug/L		54	45 - 120
Bis(2-chloroethyl)ether	30.0	16.1		ug/L		54	48 - 120
bis (2-chloroisopropyl) ether	30.0	14.4		ug/L		48	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	19.8		ug/L		66	48 - 150
4-Bromophenyl phenyl ether	30.0	29.4		ug/L		98	55 - 122
Butyl benzyl phthalate	30.0	16.4		ug/L		55	46 - 145
4-Chloroaniline	30.0	13.9		ug/L		46	30 - 120
4-Chloro-3-methylphenol	30.0	20.9		ug/L		70	39 - 140
2-Chloronaphthalene	30.0	22.0		ug/L		73	52 - 120
2-Chlorophenol	30.0	19.0		ug/L		63	34 - 120
4-Chlorophenyl phenyl ether	30.0	27.7		ug/L		92	58 - 124
Dibenz[a,h]acridine	30.0	24.4		ug/L		81	46 - 149
Dibenzofuran	30.0	23.7		ug/L		79	58 - 123
3,3'-Dichlorobenzidine	40.0	60.1	*	ug/L		150	39 - 135
2,4-Dichlorophenol	30.0	22.1		ug/L		74	39 - 128
Diethyl phthalate	30.0	24.2		ug/L		81	44 - 146
2,4-Dimethylphenol	30.0	20.3		ug/L		68	44 - 120
Dimethyl phthalate	30.0	24.2		ug/L		81	50 - 131
Di-n-butyl phthalate	30.0	22.5		ug/L		75	55 - 131
4,6-Dinitro-ortho-cresol	60.0	53.8		ug/L		90	10 - 150
2,4-Dinitrophenol	60.0	71.2		ug/L		119	10 - 150
2,4-Dinitrotoluene	30.0	26.6		ug/L		89	58 - 140
2,6-Dinitrotoluene	30.0	25.9		ug/L		86	57 - 130
Di-n-octyl phthalate	30.0	21.1		ug/L		70	50 - 150
1,4-Dioxane	30.0	12.4		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.2		ug/L		57	47 - 123
Hexachlorobenzene	30.0	32.9		ug/L		110	52 - 131
Hexachlorocyclopentadiene	30.0	10.8	J	ug/L		36	10 - 129
Hexachloroethane	30.0	13.6		ug/L		45	41 - 120

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

Lab Sample ID: LCS 400-448378/2-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	30.0	18.0		ug/L		60	47 - 120
Isophorone	30.0	16.6		ug/L		55	49 - 120
2-Methylphenol	30.0	17.7		ug/L		59	39 - 123
3 & 4 Methylphenol	30.0	19.3	J	ug/L		64	38 - 121
2-Nitroaniline	30.0	22.3		ug/L		74	47 - 150
3-Nitroaniline	30.0	23.2		ug/L		77	34 - 132
4-Nitroaniline	30.0	32.2		ug/L		107	41 - 135
Nitrobenzene	30.0	18.0		ug/L		60	47 - 120
2-Nitrophenol	30.0	19.8		ug/L		66	28 - 136
4-Nitrophenol	60.0	44.1		ug/L		74	10 - 150
N-Nitrosodimethylamine	30.0	22.4		ug/L		75	22 - 148
N-Nitrosodi-n-propylamine	30.0	20.8		ug/L		69	44 - 120
N-Nitrosodiphenylamine	29.8	23.4		ug/L		79	56 - 120
Pentachlorophenol	60.0	58.3		ug/L		97	15 - 141
Phenol	30.0	14.6		ug/L		49	33 - 120
Pyridine	60.0	29.9		ug/L		50	26 - 120
Quinoline	30.0	20.4		ug/L		68	51 - 129
2,4,5-Trichlorophenol	30.0	25.4		ug/L		85	38 - 147
2,4,6-Trichlorophenol	30.0	25.4		ug/L		85	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*51*		*27 - 120*
Phenol-d5	*47*		*10 - 120*
Terphenyl-d14	*76*		*53 - 125*
2,4,6-Tribromophenol	*121*		*15 - 135*

Lab Sample ID: LCSD 400-448378/27-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		0.7	10 - 120	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*48*		*34 - 120*
2-Fluorophenol	*30*		*10 - 120*
Nitrobenzene-d5	*38*		*27 - 120*
Phenol-d5	*35*		*10 - 120*
Terphenyl-d14	*55*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

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

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 448799

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		30.2	12.0		ug/L		40	10 - 143
Benzoic acid	ND		117	77.8		ug/L		66	10 - 134
Benzyl alcohol	ND		30.2	17.3		ug/L		57	10 - 154
Bis(2-chloroethoxy)methane	ND		30.2	14.1		ug/L		47	14 - 147
Bis(2-chloroethyl)ether	ND		30.2	14.5		ug/L		48	28 - 130
bis (2-chloroisopropyl) ether	ND		30.2	12.9		ug/L		43	10 - 141
Bis(2-ethylhexyl) phthalate	ND		30.2	9.68	J F1	ug/L		32	43 - 160
4-Bromophenyl phenyl ether	ND		30.2	19.1		ug/L		63	26 - 159
Butyl benzyl phthalate	ND		30.2	12.0	F1	ug/L		40	43 - 151
4-Chloroaniline	ND		30.2	6.61	J	ug/L		22	10 - 152
4-Chloro-3-methylphenol	ND		30.2	17.8		ug/L		59	17 - 156
2-Chloronaphthalene	ND		30.2	17.4		ug/L		58	10 - 155
2-Chlorophenol	ND		30.2	15.6		ug/L		52	19 - 130
4-Chlorophenyl phenyl ether	ND		30.2	19.2		ug/L		64	25 - 161
Dibenz[a,h]acridine	ND		30.2	8.09	J F1	ug/L		27	42 - 147
Dibenzofuran	ND		30.2	18.6		ug/L		62	18 - 157
3,3'-Dichlorobenzidine	ND	*	40.2	ND	F1	ug/L		0	10 - 172
2,4-Dichlorophenol	ND		30.2	18.2		ug/L		60	16 - 147
Diethyl phthalate	ND		30.2	19.4		ug/L		64	23 - 160
2,4-Dimethylphenol	ND		30.2	17.2		ug/L		57	25 - 146
Dimethyl phthalate	ND		30.2	18.7		ug/L		62	11 - 158
Di-n-butyl phthalate	ND		30.2	16.6		ug/L		55	28 - 162
4,6-Dinitro-ortho-cresol	ND		60.3	52.3		ug/L		87	10 - 168
2,4-Dinitrophenol	ND		60.3	72.0		ug/L		119	10 - 166
2,4-Dinitrotoluene	ND		30.2	21.3		ug/L		71	26 - 158
2,6-Dinitrotoluene	ND		30.2	20.7		ug/L		69	19 - 157
Di-n-octyl phthalate	ND		30.2	10.9	F1	ug/L		36	42 - 150
1,4-Dioxane	ND		30.2	10.2		ug/L		34	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		30.2	14.7		ug/L		49	19 - 162
Hexachlorobenzene	ND		30.2	16.3		ug/L		54	45 - 145
Hexachlorocyclopentadiene	ND		30.2	8.80	J	ug/L		29	10 - 151
Hexachloroethane	ND		30.2	12.3		ug/L		41	29 - 130
Indene	ND		30.2	16.2		ug/L		54	22 - 130
Isophorone	ND		30.2	15.2		ug/L		50	24 - 144
2-Methylphenol	ND		30.2	14.9		ug/L		50	22 - 130
3 & 4 Methylphenol	ND		30.2	15.4	J	ug/L		51	31 - 130
2-Nitroaniline	ND		30.2	17.7		ug/L		59	10 - 162
3-Nitroaniline	ND		30.2	12.3		ug/L		41	10 - 163
4-Nitroaniline	ND		30.2	24.9		ug/L		82	10 - 162
Nitrobenzene	ND		30.2	16.2		ug/L		54	34 - 135
2-Nitrophenol	ND		30.2	16.8		ug/L		56	27 - 134
4-Nitrophenol	ND		60.3	37.3		ug/L		62	10 - 175
N-Nitrosodimethylamine	ND		30.2	18.5		ug/L		61	10 - 139
N-Nitrosodi-n-propylamine	ND		30.2	17.1		ug/L		57	13 - 147
N-Nitrosodiphenylamine	ND		29.9	8.37	J F1	ug/L		28	31 - 150
Pentachlorophenol	ND		60.3	59.0		ug/L		98	10 - 180
Phenol	ND		30.2	14.2		ug/L		47	23 - 130
Pyridine	ND		60.3	25.3		ug/L		42	10 - 130

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

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 448799

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	ND		30.2	17.6		ug/L		58	10 - 180
2,4,5-Trichlorophenol	ND		30.2	21.0		ug/L		69	43 - 137
2,4,6-Trichlorophenol	ND		30.2	20.1		ug/L		67	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*53*		*27 - 120*
Phenol-d5	*40*		*10 - 120*
Terphenyl-d14	*45*	*X*	*53 - 125*
2,4,6-Tribromophenol	*88*		*15 - 135*

Lab Sample ID: 400-173038-2 MSD
Matrix: Water
Analysis Batch: 448799

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		31.1	12.6		ug/L		41	10 - 143	5	63
Benzoic acid	ND		121	77.6		ug/L		64	10 - 134	0	49
Benzyl alcohol	ND		31.1	16.9		ug/L		54	10 - 154	2	37
Bis(2-chloroethoxy)methane	ND		31.1	13.8		ug/L		44	14 - 147	2	70
Bis(2-chloroethyl)ether	ND		31.1	13.3		ug/L		43	28 - 130	9	42
bis (2-chloroisopropyl) ether	ND		31.1	12.2		ug/L		39	10 - 141	5	41
Bis(2-ethylhexyl) phthalate	ND		31.1	11.0	F1	ug/L		35	43 - 160	13	35
4-Bromophenyl phenyl ether	ND		31.1	19.2		ug/L		62	26 - 159	1	30
Butyl benzyl phthalate	ND		31.1	12.0	F1	ug/L		39	43 - 151	1	32
4-Chloroaniline	ND		31.1	7.37	J	ug/L		24	10 - 152	11	94
4-Chloro-3-methylphenol	ND		31.1	17.6		ug/L		57	17 - 156	1	40
2-Chloronaphthalene	ND		31.1	17.2		ug/L		55	10 - 155	1	29
2-Chlorophenol	ND		31.1	15.5		ug/L		50	19 - 130	1	42
4-Chlorophenyl phenyl ether	ND		31.1	18.8		ug/L		61	25 - 161	2	27
Dibenz[a,h]acridine	ND		31.1	7.25	J F1	ug/L		23	42 - 147	11	40
Dibenzofuran	ND		31.1	18.2		ug/L		58	18 - 157	2	29
3,3'-Dichlorobenzidine	ND	*	41.5	ND	F1	ug/L		0	10 - 172	NC	58
2,4-Dichlorophenol	ND		31.1	18.3		ug/L		59	16 - 147	0	43
Diethyl phthalate	ND		31.1	18.9		ug/L		61	23 - 160	3	40
2,4-Dimethylphenol	ND		31.1	17.2		ug/L		55	25 - 146	0	47
Dimethyl phthalate	ND		31.1	18.3		ug/L		59	11 - 158	2	36
Di-n-butyl phthalate	ND		31.1	15.5		ug/L		50	28 - 162	7	32
4,6-Dinitro-ortho-cresol	ND		62.2	52.3		ug/L		84	10 - 168	0	42
2,4-Dinitrophenol	ND		62.2	72.7		ug/L		117	10 - 166	1	36
2,4-Dinitrotoluene	ND		31.1	20.9		ug/L		67	26 - 158	2	28
2,6-Dinitrotoluene	ND		31.1	19.9		ug/L		64	19 - 157	4	28
Di-n-octyl phthalate	ND		31.1	12.4	F1	ug/L		40	42 - 150	13	35
1,4-Dioxane	ND		31.1	8.86	J	ug/L		28	10 - 130	14	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		31.1	14.3		ug/L		46	19 - 162	3	40
Hexachlorobenzene	ND		31.1	18.3		ug/L		59	45 - 145	12	33
Hexachlorocyclopentadiene	ND		31.1	8.61	J	ug/L		28	10 - 151	2	50

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

Lab Sample ID: 400-173038-2 MSD
Matrix: Water
Analysis Batch: 448799

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	ND		31.1	12.1		ug/L		39	29 - 130	2	41
Indene	ND		31.1	15.4		ug/L		49	22 - 130	5	40
Isophorone	ND		31.1	14.6		ug/L		47	24 - 144	4	33
2-Methylphenol	ND		31.1	14.5		ug/L		47	22 - 130	3	47
3 & 4 Methylphenol	ND		31.1	15.1	J	ug/L		49	31 - 130	2	47
2-Nitroaniline	ND		31.1	17.1		ug/L		55	10 - 162	3	33
3-Nitroaniline	ND		31.1	12.3		ug/L		40	10 - 163	0	39
4-Nitroaniline	ND		31.1	23.5		ug/L		76	10 - 162	5	50
Nitrobenzene	ND		31.1	15.5		ug/L		50	34 - 135	4	35
2-Nitrophenol	ND		31.1	16.7		ug/L		54	27 - 134	1	43
4-Nitrophenol	ND		62.2	39.3		ug/L		63	10 - 175	5	82
N-Nitrosodimethylamine	ND		31.1	17.8		ug/L		57	10 - 139	4	62
N-Nitrosodi-n-propylamine	ND		31.1	16.3		ug/L		53	13 - 147	5	36
N-Nitrosodiphenylamine	ND		30.8	12.3	F2	ug/L		40	31 - 150	38	34
Pentachlorophenol	ND		62.2	58.8		ug/L		94	10 - 180	0	42
Phenol	ND		31.1	12.7		ug/L		41	23 - 130	11	52
Pyridine	ND		62.2	24.7		ug/L		40	10 - 130	2	55
Quinoline	ND		31.1	17.0		ug/L		55	10 - 180	3	40
2,4,5-Trichlorophenol	ND		31.1	20.4		ug/L		66	43 - 137	3	42
2,4,6-Trichlorophenol	ND		31.1	20.1		ug/L		65	42 - 135	0	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*52*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*49*		*27 - 120*
Phenol-d5	*39*		*10 - 120*
Terphenyl-d14	*44*	*X*	*53 - 125*
2,4,6-Tribromophenol	*85*		*15 - 135*

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

Lab Sample ID: MB 400-448378/1-A
Matrix: Water
Analysis Batch: 448806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
Anthracene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Chrysene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1
Fluoranthene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
Fluorene	ND		0.20	0.021	ug/L		07/17/19 10:30	07/20/19 11:36	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/17/19 10:30	07/20/19 11:36	1

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

Lab Sample ID: MB 400-448378/1-A
Matrix: Water
Analysis Batch: 448806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
Pyrene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 10:30	07/20/19 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*33 - 138*	*07/17/19 10:30*	*07/20/19 11:36*	*1*
2-Fluorobiphenyl	*54*		*15 - 122*	*07/17/19 10:30*	*07/20/19 11:36*	*1*
Nitrobenzene-d5	*56*		*19 - 130*	*07/17/19 10:30*	*07/20/19 11:36*	*1*

Lab Sample ID: LCS 400-448378/2-A
Matrix: Water
Analysis Batch: 449815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	26.9		ug/L		90	41 - 120
Acenaphthylene	30.0	26.3		ug/L		88	44 - 120
Anthracene	30.0	29.4		ug/L		98	49 - 120
Benzo[a]anthracene	30.0	28.0		ug/L		93	61 - 135
Benzo[a]pyrene	30.0	28.7		ug/L		96	52 - 120
Benzo[b]fluoranthene	30.0	28.7		ug/L		96	53 - 134
Benzo[g,h,i]perylene	30.0	31.4		ug/L		105	47 - 133
Benzo[k]fluoranthene	30.0	28.9		ug/L		96	57 - 134
Chrysene	30.0	29.4		ug/L		98	55 - 122
Dibenz(a,h)anthracene	30.0	32.9		ug/L		110	48 - 146
Fluoranthene	30.0	28.1		ug/L		94	54 - 128
Fluorene	30.0	29.6		ug/L		99	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	31.9		ug/L		106	43 - 142
Phenanthrene	30.0	28.6		ug/L		95	48 - 120
Pyrene	30.0	30.9		ug/L		103	48 - 132
1-Methylnaphthalene	30.0	18.8		ug/L		63	41 - 120
2-Methylnaphthalene	30.0	18.0		ug/L		60	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*89*		*33 - 138*
2-Fluorobiphenyl	*68*		*15 - 122*
Nitrobenzene-d5	*68*		*19 - 130*

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 448806

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND	F1	30.2	38.2	F1	ug/L		127	35 - 113
Acenaphthylene	ND	F1	30.2	37.0	F1	ug/L		123	41 - 118
Anthracene	ND		30.2	28.9		ug/L		96	45 - 122
Benzo[a]anthracene	ND		30.2	24.5		ug/L		81	55 - 133
Benzo[a]pyrene	ND		30.2	22.6		ug/L		75	50 - 108

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

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 448806

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	ND		30.2	24.7		ug/L		82	50 - 128
Benzo[g,h,i]perylene	ND		30.2	25.1		ug/L		83	46 - 133
Benzo[k]fluoranthene	ND		30.2	22.3		ug/L		74	52 - 128
Chrysene	ND		30.2	23.4		ug/L		78	52 - 116
Dibenz(a,h)anthracene	ND		30.2	23.7		ug/L		79	52 - 143
Fluoranthene	ND		30.2	24.2		ug/L		80	32 - 150
Fluorene	ND		30.2	38.9		ug/L		129	15 - 150
Indeno[1,2,3-cd]pyrene	ND		30.2	24.5		ug/L		81	41 - 141
Phenanthrene	ND		30.2	34.5		ug/L		114	36 - 125
Pyrene	ND		30.2	32.2		ug/L		107	41 - 127
1-Methylnaphthalene	ND		30.2	27.1		ug/L		90	10 - 150
2-Methylnaphthalene	ND		30.2	26.9		ug/L		89	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*
2-Fluorobiphenyl	*109*		*15 - 122*
Nitrobenzene-d5	*100*		*19 - 130*

Lab Sample ID: 400-173038-2 MSD
Matrix: Water
Analysis Batch: 448806

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND	F1	31.1	28.2		ug/L		91	35 - 113	30	49
Acenaphthylene	ND	F1	31.1	27.7		ug/L		89	41 - 118	29	48
Anthracene	ND		31.1	23.2		ug/L		75	45 - 122	22	56
Benzo[a]anthracene	ND		31.1	20.3		ug/L		65	55 - 133	19	57
Benzo[a]pyrene	ND		31.1	19.9		ug/L		64	50 - 108	13	59
Benzo[b]fluoranthene	ND		31.1	21.6		ug/L		69	50 - 128	14	62
Benzo[g,h,i]perylene	ND		31.1	20.9		ug/L		67	46 - 133	18	58
Benzo[k]fluoranthene	ND		31.1	20.0		ug/L		64	52 - 128	11	58
Chrysene	ND		31.1	20.3		ug/L		65	52 - 116	14	59
Dibenz(a,h)anthracene	ND		31.1	20.7		ug/L		67	52 - 143	14	60
Fluoranthene	ND		31.1	19.5		ug/L		63	32 - 150	22	59
Fluorene	ND		31.1	28.8		ug/L		93	15 - 150	30	49
Indeno[1,2,3-cd]pyrene	ND		31.1	20.7		ug/L		67	41 - 141	17	58
Phenanthrene	ND		31.1	25.9		ug/L		83	36 - 125	29	69
Pyrene	ND		31.1	25.8		ug/L		83	41 - 127	22	58
1-Methylnaphthalene	ND		31.1	21.2		ug/L		68	10 - 150	24	66
2-Methylnaphthalene	ND		31.1	21.2		ug/L		68	10 - 150	24	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*73*		*33 - 138*
2-Fluorobiphenyl	*79*		*15 - 122*
Nitrobenzene-d5	*75*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-448993/1-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448993

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		07/22/19 13:44	07/22/19 20:02	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 13:44	07/22/19 20:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*07/22/19 13:44*	*07/22/19 20:02*	*1*

Lab Sample ID: LCS 400-448993/2-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.0897		ug/L		90	60 - 140
1,2-Dibromoethane	0.100	0.0911		ug/L		91	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*51 - 149*

Lab Sample ID: 400-173038-2 MS
Matrix: Water
Analysis Batch: 449076

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448993

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.101	0.101		ug/L		100	65 - 135
1,2-Dibromoethane	ND		0.101	0.0978		ug/L		97	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*51 - 149*

Lab Sample ID: 400-173038-2 MSD
Matrix: Water
Analysis Batch: 449076

Client Sample ID: MW6A-ROX-071119
Prep Type: Total/NA
Prep Batch: 448993

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		0.101	0.0848		ug/L		84	65 - 135	17	20
1,2-Dibromoethane	ND		0.101	0.0873		ug/L		87	65 - 135	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*51 - 149*

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ACCUTEST (_____)
☐CALSCIENCE (_____)
☑TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐Other (Lab Vendor # 1364589 (TestAmerica))

Please Check Appropriate Box:

☐SGW FDG	☐PIPELINE	☐RETAIL
☐CHEMICALS	☐CONSULTANT	☐LUBES
☐TRANSPORTATION	☑OTHER _ENV. SERVICES	

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

PO #: 60592794 - 1.03.003 | 60592794 - 1.03.0033

GSAP Project ID: USPC/00114/R/02

☐CHECK IF NO INCIDENT # APPLIES
DATE: 7-11-19
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 60592794 - 1.03.003 | 60592794 - 1.03.0033
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com; elizabeth.kunkel@aecom.com; bob.billman@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): T. Joner, I. Partin, J. Raggatz
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑STANDARD (14 DAY) ☐5 DAYS ☐3 DAYS ☐2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND

☐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 60592794 - 1.03.003: VOC 8260, SVOC 8270
UNIT COST 60592794 - 1.03.0033: VOC 8011, PAH 8270LL

400-173038 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-Rox-071119-8260	7-11-19	0000	Water	X					2	2				
	MW6A-Rox-071119		0915		X			X		6	2	1	2	1	
	MW6A-Rox-071119-MS		0915		X			X		6	2	1	2	1	
	MW6A-Rox-071119-MSD		0915		X			X		6	2	1	2	1	
	MW6B-Rox-071119		1005		X			X		6	2	1	2	1	1 Bottle For PAH
	MW6D-Rox-071119		1045		X			X		6	2	1	2	1	
	MW6C-Rox-071119		1135		X			X		6	2	1	2	1	
	MW1-Rox-071119-EB		1220		X			X		6	2	1	2	1	
	MW1-Rox-071119		1315		X			X		6	2	1	2	1	
	Rust3MW-Rox-071119		1400		X			X		6	2	1	2	1	

Relinquished by (Signature): T	Received by (Signature): Fedex: 478128825414; 478228825425; 478228825469	Date: 7-11-19	Time: 1800
Relinquished by (Signature):	Received by (Signature):	Date: 07-12-19	Time: 919
Relinquished by (Signature):	Received by (Signature):	Date:	Time:

Version: 14Dec15

Custody Seals: 1003229, 1003228, 1003231, 1003230, 1003233, 1003232

2.5°C, 1.2°C, 4.1°C
IR8

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8/6/2019

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ACCUTEST (_____)
☐CALSCIENCE (_____)
☑TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr Pensacola, FL 32514 (850-474-1001))
☐Other (Lab Vendor # 1364589 (TestAmerica))

Please Check Appropriate Box:
☐SGW FDG ☐PIPELINE ☐RETAIL
☐CHEMICALS ☐CONSULTANT ☐LUBES
☐TRANSPORTATION ☑OTHER _ENV. SERVICES

Print Bill To Contact Name: Bob Billman
PO #: 60592794 - 1.03.003 | 60592794 - 1.03.0033
PlaNet Site or Project ID: 25278
GSAP Project ID: USPC/00114/R/02

☐CHECK IF NO INCIDENT # APPLIES
DATE: 7-11-19
PAGE: 2 of 2

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): 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
60592794 - 1.03.003 | 60592794 - 1.03.0033
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Other ID:
SAMPLER NAME(S) (Print): T. Joner, I. Partin, J. Ragatz
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑STANDARD (14 DAY) ☐5 DAYS ☐3 DAYS ☐2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND

☐LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑LEVEL 2 ☐LEVEL 3 ☑LEVEL 4 ☑OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
- Please include "J" values on Reports
- Please provide sample receipt upon login

☑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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-Rox-071119-8011	7-11-19	0000	Water	X					2			2		

Relinquished by (Signature): T
Received by (Signature): Fedex: 478228825414; 478228825425; 478228825436
Date: 7-11-19 Time: 1800

Relinquished by (Signature):
Received by: (Signature): Diego Avella
Date: 07.12.19 Time: 919

Relinquished by (Signature):
Received by: (Signature):
Date: Time:

Version 14Dec15

Custody Seals: 1003229, 1003228, 1003231, 1003230, 1003233, 1003232

2.5°C, 1.2°C, 4.1°C

IR8

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8/6/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-173038-1

Login Number: 173038
List Number: 1
Creator: Perez, Trina M

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	2.5°C, 1.2°C, 4.1°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.	False	Refer to Job Narrative for details.
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: 400-173038-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-173131-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/9/2019

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

Sample Identification	Sample Identification
TB-ROX-071219-8011-A	TB-ROX-071219-8026-A
ROST4PZG-ROX-071219	MW10-ROX-071219
MW5-ROX-071219	ROST4PZE-ROX-071219
ROST4PZC-ROX-071219	TB-ROX-071219-8260-B
TB-ROX-071219-8011-B	P74-ROX-071219-EB
P74-ROX-071219	P93C-ROX-071219
P93D-ROX-071219	P93B-ROX-071219
P93B-ROX-071219-Dup	P56-ROX-071219

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated PAHs and SVOCs were re-extracted outside of the extraction time criteria in several samples. Several VOCs and PAHs were detected in equipment blank P74-ROX-071219-EB, and several SVOCs and PAHs were detected in the method blanks. Several SVOC LCS/LCD recoveries and/or SVOC LCS/LCSD RPDs were outside evaluation criteria. Surrogate compounds were inadvertently omitted by the laboratory during the initial SVOC/PAH extraction process in several samples; several SVOC, PAH, and VOC by 8011 surrogate recoveries were outside criteria in several investigative and QC samples. The MS/MSD recoveries and MS/MSD RPDs for 2-chloroethyl vinyl ether were outside evaluation criteria in sample P74-ROX-071219. Several PAH and SVOC internal standard area recoveries were outside criteria in several samples. In field duplicate pair P93B-ROX-071219/P93B-ROX-071219-Dup, results for benzene were qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**J**). PAHs in samples ROST4PZE-ROX-071219, ROST4PZC-ROX-071219, and P56-ROX-071219; and VOCs and phenol in field duplicate pair P93B-ROX-071219/P93B-ROX-071219-Dup, were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications for bis(2-chloroethyl) ether and dibenz[a,h]acridine were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, PAHs and SVOCs were re-extracted 5 days outside of the extraction time criteria (7 days) in samples MW10-ROX-071219, MW5-ROX-071219, ROST4PZE-ROX-071219, ROST4PZC-ROX-071219, and equipment blank P74-ROX-071219-EB. PAHs and SVOCs were re-extracted 6 days outside of the extraction time criteria (7 days) in samples P74-ROX-071219, P93C-ROX-071219, P56-ROX-071219 and field duplicate pair P93B-ROX-071219/P93B-ROX-071219-Dup. Re-extraction was due to surrogate compounds inadvertently omitted by the laboratory during the initial extraction process. Professional judgement was used to qualify as estimated (**J/UJ**); however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-071219 – RE	PAHs	All non-detects	**UJ**
MW10-ROX-071219 – RE	PAHs	Fluoranthene	**J**
MW10-ROX-071219 – RE	PAHs	Indeno[1,2,3-cd]pyrene	**J**
MW10-ROX-071219 – RE	PAHs	Pyrene	**J**
MW10-ROX-071219 – RE	PAHs	1-Methylnaphthalene	**J**
MW10-ROX-071219 – RE	PAHs	2-Methylnaphthalene	**J**
MW10-ROX-071219 – RERA	SVOCs	All non-detects	**UJ**
MW5-ROX-071219 – RE	PAHs	All non-detects	**UJ**
MW5-ROX-071219 – RE	PAHs	1-Methylnaphthalene	**J**
MW5-ROX-071219 – RERA	SVOCs	Di-n-octyl phthalate	**J**
MW5-ROX-071219 – RERA	SVOCs	All non-detects	**UJ**
ROST4PZE-ROX-071219 – RE	PAHs	All non-detects	**UJ**
ROST4PZE-ROX-071219 – RE	PAHs	Acenaphthene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	Anthracene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	Chrysene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	Fluoranthene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	Fluorene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	Phenanthrene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	Pyrene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	1-Methylnaphthalene	**J**
ROST4PZE-ROX-071219 – RE	PAHs	2-Methylnaphthalene	**J**
ROST4PZE-ROX-071219 – RERA	SVOCs	Phenol	**J**
ROST4PZE-ROX-071219 – RERA	SVOCs	All non-detects	**UJ**
ROST4PZC-ROX-071219 – RE	PAHs	All non-detects	**UJ**
ROST4PZC-ROX-071219 – RE	PAHs	Acenaphthene	**J**
ROST4PZC-ROX-071219 – RE	PAHs	Anthracene	**J**
ROST4PZC-ROX-071219 – RE	PAHs	Fluorene	**J**
ROST4PZC-ROX-071219 – RE	PAHs	Phenanthrene	**J**
ROST4PZC-ROX-071219 – RE	PAHs	1-Methylnaphthalene	**J**
ROST4PZC-ROX-071219 – RE	PAHs	2-Methylnaphthalene	**J**
ROST4PZC-ROX-071219 – RERA	SVOCs	All non-detects	**UJ**
ROST4PZC-ROX-071219 – RERA	SVOCs	Dibenzofuran	**J**
ROST4PZC-ROX-071219 – RERA	SVOCs	Indene	**J**

Sample ID	Parameter	Analyte	Qualification
P74-ROX-071219 – RE	PAHs	Fluoranthene	J
P74-ROX-071219 – RE	PAHs	All non-detects	UJ
P74-ROX-071219 – RERA	SVOCs	All non-detects	UJ
P93C-ROX-071219 – RE	PAHs	All non-detects	UJ
P93C-ROX-071219 – RERA	SVOCs	All non-detects	UJ
P93B-ROX-071219 – RE	PAHs	All non-detects	UJ
P93B-ROX-071219 – RERA	SVOCs	Phenol	J
P93B-ROX-071219 – RERA	SVOCs	All non-detects	UJ
P93B-ROX-071219-Dup – RE	PAHs	All non-detects	UJ
P93B-ROX-071219-Dup – RERA	SVOCs	All non-detects	UJ
P93B-ROX-071219-Dup – RERA	SVOCs	Phenol	J
P56-ROX-071219 – RE	PAHs	Acenaphthene	J
P56-ROX-071219 – RE	PAHs	Anthracene	J
P56-ROX-071219 – RE	PAHs	Fluorene	J
P56-ROX-071219 – RE	PAHs	Phenanthrene	J
P56-ROX-071219 – RE	PAHs	1-Methylnaphthalene	J
P56-ROX-071219 – RE	PAHs	2-Methylnaphthalene	J
P56-ROX-071219 – RE	PAHs	All non-detects	UJ
P56-ROX-071219 – RERA	SVOCs	All non-detects	UJ
P56-ROX-071219 – RERA	SVOCs	Di-n-octyl phthalate	J
P56-ROX-071219 – RERA	SVOCs	3&4 Methylphenol	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
P74-ROX-071219-EB	VOCs	2-Butanone (MEK)	3.6 µg/L
P74-ROX-071219-EB	PAHs	Phenanthrene	0.027 µg/L
P74-ROX-071219-EB	PAHs	1-Methylnaphthalene	0.026 µg/L
MB 400-448434/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	13.0 µg/L
MB 400-448615/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	8.53 µg/L
MB 400-449437/1-A	PAHs	Fluoranthene	0.0465 µg/L
MB 400-449437/1-A	PAHs	Pyrene	0.0411 µg/L
MB 400-449448/1-A	PAHs	1-Methylnaphthalene	0.0335 µg/L
MB 400-449448/1-A	PAHs	2-Methylnaphthalene	0.0549 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
ROST4PZG-ROX-071219	SVOCs	bis(2-Ethylhexyl) phthalate	-	U
MW10-ROX-071219 – RE	PAHs	Fluoranthene	-	U(J)

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
MW10-ROX-071219 – RE	PAHs	Pyrene	-	**U(J)**

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 400-448434/22-A/23-A	SVOCs	Benzenethiol	**1/2**	24	10-120/30
LCS/LCSD 400-448434/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	133/**145**	9	39-135/30
LCS/LCSD 400-448615/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**144**/138	4	39-135/30
LCS/LCSD 400-448615/2-A/3-A	SVOCs	Hexachloroethane	41/**40**	4	41-120/30
LCS/LCSD 400-449437/4-A/5-A	SVOCs	Benzenethiol	**3**/50	**178**	10-120/30
LCS/LCSD 400-449448/20-A/21-A	SVOCs	Benzoic acid	30/42	**33**	10-150/30
LCS/LCSD 400-449448/20-A/21-A	SVOCs	2,4-Dinitrotoluene	**56**/67	17	58-140/30
LCS/LCSD 400-449448/20-A/21-A	SVOCs	2,6-Dinitrotoluene	**55**/66	19	57-130/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-448434/22-A/23-A and LCS/LCSD 400-449437/4-A/5-A; 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. SVOCs in several samples were previously qualified in Section 3.0 of this review due to holding time criteria; no further qualification of this data was required.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-071219	SVOCs	Benzenethiol	**UJ**
P93D-ROX-071219	SVOCs	Benzenethiol	**UJ**
P93D-ROX-071219	SVOCs	Hexachloroethane	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No, surrogate compounds were inadvertently omitted by the laboratory during the initial SVOC/PAH extraction process in several samples; these samples were re-extracted outside of holding time criteria and are qualified in Section 3.0 of this review.

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZC-ROX-071219 – RERA	SVOCs	Terphenyl-d_{14}	**45**	53-125
P93C-ROX-071219 – RERA	SVOCs	Terphenyl-d_{14}	**52**	53-125
P93B-ROX-071219 – RERA	SVOCs	Terphenyl-d_{14}	**52**	53-125
P93B-ROX-071219-Dup – RERA	SVOCs	Terphenyl-d_{14}	**42**	53-125
P56-ROX-071219 – RE	PAHs	Terphenyl-d_{14}	**14**	33-138
P56-ROX-071219 – RERA	SVOCs	Phenol-d_5	**130**	10-120
P56-ROX-071219 – RERA	SVOCs	Terphenyl-d_{14}	**12**	53-125
P56-ROX-071219	VOCs by 8011	4-Bromofluorobenzene	**478**	51-149
MB 400-448615/1-A	PAHs	Terphenyl-d_{14}	**230**	33-138
MB 400-448615/1-A	PAHs	2-Fluorobiphenyl	**146**	15-122

Qualifications due to surrogate recoveries were not required if only one of three base/neutral or acid fraction surrogate recoveries were outside evaluation criteria in the associated SVOC and/or PAH samples. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Method blank MB 400-448615/1-A is a quality control sample and does not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample P74-ROX-071219 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
P74-ROX-071219	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.

Sample ID	Parameter	Analyte	Qualification
P74-ROX-071219	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
P56-ROX-071219 DL	SVOCs	Perylene-d_{12}	**279116**	284822-1139286

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
MW10-ROX-071219	SVOCs	Perylene-d_{12}	**328578**	351595-1406378
P74-ROX-071219-EB	SVOCs	Perylene-d_{12}	**297648**	351595-1406378
ROST4PZC-ROX-071219	PAHs	Chrysene-d_{12}	**362013**	364221-1456884
ROST4PZC-ROX-071219	PAHs	Perylene-d_{12}	**230415**	247612-990448
P74-ROX-071219-EB	PAHs	Chrysene-d_{12}	**333654**	364221-1456884
P93B-ROX-071219-Dup	PAHs	Chrysene-d_{12}	**339030**	364221-1456884
P93B-ROX-071219	PAHs	Acenaphthene-d_{10}	**1019121**	249397-997586
P93B-ROX-071219	PAHs	Phenanthrene-d_{10}	**1630075**	357422-1429688
P74-ROX-071219-EB	PAHs	Phenanthrene-d_{10}	**1481146**	357422-1429688
P93B-ROX-071219	PAHs	Chrysene-d_{12}	**1098489**	255934-1023736

Equipment blank P74-ROX-071219-EB is a quality control sample and does not require qualification. SVOCs and PAHs associated with internal standards outside evaluation criteria were previously qualified in Section 3.0 of this review due to holding time criteria; no further qualification of this 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-071219	P93B-ROX-071219-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P93B-ROX-071219	P93B-ROX-071219-Dup	VOCs	Benzene	**26**	**J/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for bis(2-chloroethyl) ether and dibenz[a,h]acridine were below acceptance criteria, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-071219	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P93D-ROX-071219	SVOCs	Dibenz[a,h]acridine	**UJ**

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 400-173131-1
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:
8/6/2019 3:45:54 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 8/9/19 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.

LINKS

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Job ID: 400-173131-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-173131-1

Comments
No additional comments.

Receipt
The samples were received on 7/13/2019 9:04 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.0° C, 3.6° C, 3.7° C and 4.8° C.

GC/MS VOA
Method(s) 8260B: The initial calibration verification (ICV) analyzed in batch 400-441311 was outside method criteria for the following analyte(s): Bromomethane As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 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-071219-8026-A (400-173131-2), ROST4PZG-ROX-071219 (400-173131-3), MW10-ROX-071219 (400-173131-4), MW5-ROX-071219 (400-173131-5), ROST4PZE-ROX-071219 (400-173131-6), ROST4PZC-ROX-071219 (400-173131-7), TB-ROX-071219-8260-B (400-173131-8), P74-ROX-071219-EB (400-173131-10), P74-ROX-071219 (400-173131-11), P93C-ROX-071219 (400-173131-12), P93D-ROX-071219 (400-173131-13), P93B-ROX-071219 (400-173131-14), P93B-ROX-071219-DUP (400-173131-15), P56-ROX-071219 (400-173131-16). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-448795 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method(s) 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-448795 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-071219 (400-173131-14) and P93B-ROX-071219-DUP (400-173131-15). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample contained 2-Butanone (MEK) above the MDL: P74-ROX-071219-EB (400-173131-10). Reanalysis was performed with concurring results.

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

GC/MS Semi VOA
Method(s) 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-448615 and analytical batch 400-448802 recovered outside control limits for the following analytes: Benzenethiol.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448802 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Nitrophenol, 4-Chloro-3-methylphenol and Aniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448802 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether and Dibenz[a,h]acridine. 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448802 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448987 recovered above the upper control limit

Job ID: 400-173131-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

for Hexachlorobenzene, 4-Chlorophenyl phenyl ether and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448987 recovered outside acceptance criteria, low biased, for Aniline. 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(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-448434 and 400-448434 and analytical batch 400-448799 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(s) 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-448434 and analytical batch 400-448799 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. The analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The internal standard Perylene-d12 and Chrysene-d12 response were outside of acceptance limits for the following sample: P74-ROX-071219-EB (400-173131-10). Results for the affected analytes are possibly biased high, non-detect are qualified accordingly; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448799 recovered above the upper control limit for 2,4-Dinitrophenol, Hexachlorobenzene, 4-Bromophenyl phenyl ether and 2,4-Dinitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The method blank for preparation batch 400-448434 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). The samples associated with this method blank were either non-detect or less than the reporting limit.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448799 recovered outside acceptance criteria, low biased, for bis (2-chloroisopropyl) ether, Phenol, Butyl benzyl phthalate, Pyridine, 1,4-Dioxane and 1,2-Diphenylhydrazine (as Azobenzene). 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(s) 8270D: The method blank for preparation batch 400-448615 and analytical batch 400-449209 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-449209 recovered above the upper control limit for 3,3'-Dichlorobenzidine, 4,6-Dinitro-ortho-cresol, 4-Bromophenyl phenyl ether and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-449209 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether, 4-Chlorophenyl phenyl ether, 1,4-Dioxane and Pyridine. 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(s) 8270D: The following analyte(s) recovered outside control limits for the LCS and LCSD associated with preparation batch 400-448615 and analytical batch 400-449209: Hexachloroethane and 3,3'-Dichlorobenzidine. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-448615 and analytical batch 400-448802 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(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-449815 recovered above the upper control

Job ID: 400-173131-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

limit for Benzo[g,h,i]perylene, Indeno[1,2,3-cd]pyrene 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(s) 8270D LL: Surrogate recovery for the following sample was outside the upper control limit: (MB 400-448615/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 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: ROST4PZC-ROX-071219 (400-173131-7), P93C-ROX-071219 (400-173131-12), P93B-ROX-071219 (400-173131-14), P93B-ROX-071219-DUP (400-173131-15), P56-ROX-071219 (400-173131-16). These results have been reported and qualified.

Method(s) 8270D LL: The following sample was diluted due to the nature of the sample matrix: ROST4PZE-ROX-071219 (400-173131-6). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-449448 and analytical batch 400-450203: 2,4-Dinitrotoluene and 2,6-Dinitrotoluene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-449448 and analytical batch 400-450203 recovered outside control limits for the following analytes: Benzoic acid.

Method(s) 8270D LL: Two of six internal standards used to quantify target analytes in the following sample was outside of the control limit due to matrix interference: ROST4PZC-ROX-071219 (400-173131-7). Re-analysis at dilution to mitigate this interference would serve only to raise the reporting limit (RL). Since no target analytes associated with the internal standard were detected, the data have been reported and qualified accordingly.

Method(s) 8270D LL: One of six internal standards used to quantify target analytes in the following samples were outside of the control limit due to matrix interference: P74-ROX-071219-EB (400-173131-10) and P93B-ROX-071219-DUP (400-173131-15). Re-analysis at dilution to mitigate this interference would serve only to raise the reporting limit (RL). Since no target analytes associated with the internal standard were detected, the data have been reported and qualified accordingly.

Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-449437 and analytical batch 400-450063 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(s) 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-449437 and analytical batch 400-450063 recovered outside control limits for the following analytes: Benzenethiol.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450063 recovered above the upper control limit for Indene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450063 recovered above the upper control limit for Hexachloroethane, N-Nitrosodimethylamine, N-Nitrosodi-n-propylamine and 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: Surrogate compounds were inadvertently omitted during the extraction process for the following sample(s): LCS 400-448434. Re-extraction and/or re-analysis was performed outside of the method defined holding-time. Both sets of data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450467 recovered above the upper control limit for Nitrobenzene, N-Nitrosodi-n-propylamine, 2,4-Dimethylphenol and 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-173131-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450467 recovered outside acceptance criteria, low biased, for 2-Chloronaphthalene, 2,6-Dinitrotoluene and 2,4-Dinitrotoluene . 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450467 recovered outside acceptance criteria, low biased, for 2-Chloronaphthalene, 2,6-Dinitrotoluene and 2,4-Dinitrotoluene. 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450203 recovered above the upper control limit for N-Nitrosodi-n-propylamine, Nitrobenzene, 4-Nitrophenol and 2,4-Dimethylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450203 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D LL: The method blank for preparation batch 400-449437 and analytical batch 400-450489 contained Fluoranthene and Pyrene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450569 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene, Quinoline, 2,6-Dinitrotoluene and Dibenz[a,h]acridine. 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450569 recovered above the upper control limit for Indene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450569 recovered above the upper control limit for Hexachloroethane, 1,2-Diphenylhydrazine (as Azobenzene), Aniline, 4-Nitrophenol, N-Nitrosodimethylamine, Nitrobenzene, Isophorone, N-Nitrosodi-n-propylamine, 4-Chloroaniline, 1,4-Dioxane, Benzyl alcohol and 2,4-Dimethylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-071219 (400-173131-14) and P93B-ROX-071219-DUP (400-173131-15). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-450762 recovered above the upper control limit for Diethyl phthalate, Hexachlorocyclopentadiene, Dibenzofuran, Dimethyl phthalate, 2-Chloronaphthalene, 4-Chlorophenyl phenyl ether and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D LL: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: P56-ROX-071219 (400-173131-16).

Method(s) 8270D LL: The method blank for preparation batch 400-449448 and analytical batch 400-450731 contained 1-Methylnaphthalene and 2-Methylnaphthalene 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(s) 8270D LL: Surrogate compounds were inadvertently omitted during the extraction process for the following samples: MW10-ROX-071219 (400-173131-4), MW5-ROX-071219 (400-173131-5), ROST4PZE-ROX-071219 (400-173131-6), ROST4PZC-ROX-071219 (400-173131-7), P74-ROX-071219-EB (400-173131-10), P74-ROX-071219 (400-173131-11), P93C-ROX-071219 (400-173131-12), P93B-ROX-071219 (400-173131-14), P93B-ROX-071219-DUP (400-173131-15) and P56-ROX-071219 (400-173131-16). Re-extraction and/or re-analysis was performed outside of the method defined holding-time. Both sets of data have been reported.

Job ID: 400-173131-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8270D LL: The following sample was diluted due to the nature of the sample matrix: ROST4PZC-ROX-071219 (400-173131-7). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 8011: Surrogate recovery for the following sample was outside control limits: P56-ROX-071219 (400-173131-16). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8011: The continuing calibration verification (CCV) associated with batch 400-449076 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 additional analytical or quality issues were noted, other than those described above or 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: 400-173131-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-173131-1	TB-ROX-071219-8011-A	Water	07/12/19 08:00	07/13/19 09:04	
400-173131-2	TB-ROX-071219-8026-A	Water	07/12/19 08:00	07/13/19 09:04	
400-173131-3	ROST4PZG-ROX-071219	Water	07/12/19 08:50	07/13/19 09:04	
400-173131-4	MW10-ROX-071219	Water	07/12/19 09:40	07/13/19 09:04	
400-173131-5	MW5-ROX-071219	Water	07/12/19 10:30	07/13/19 09:04	
400-173131-6	ROST4PZE-ROX-071219	Water	07/12/19 11:20	07/13/19 09:04	
400-173131-7	ROST4PZC-ROX-071219	Water	07/12/19 12:10	07/13/19 09:04	
400-173131-8	TB-ROX-071219-8260-B	Water	07/12/19 00:00	07/13/19 09:04	
400-173131-9	TB-ROX-071219-8011-B	Water	07/12/19 00:00	07/13/19 09:04	
400-173131-10	P74-ROX-071219-EB	Water	07/12/19 08:55	07/13/19 09:04	
400-173131-11	P74-ROX-071219-	Water	07/12/19 09:20	07/13/19 09:04	
400-173131-12	P93C-ROX-071219	Water	07/12/19 10:10	07/13/19 09:04	
400-173131-13	P93D-ROX-071219	Water	07/12/19 10:55	07/13/19 09:04	
400-173131-14	P93B-ROX-071219	Water	07/12/19 11:20	07/13/19 09:04	
400-173131-15	P93B-ROX-071219-DUP	Water	07/12/19 11:20	07/13/19 09:04	
400-173131-16	P56-ROX-071219	Water	07/12/19 13:15	07/13/19 09:04	

Detection Summary

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

Job ID: 400-173131-1

Client Sample ID: TB-ROX-071219-8011-A — Lab Sample ID: 400-173131-1

No Detections.

Client Sample ID: TB-ROX-071219-8026-A — Lab Sample ID: 400-173131-2

No Detections.

Client Sample ID: ROST4PZG-ROX-071219 — Lab Sample ID: 400-173131-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.0	J	25	2.6	ug/L	1		8260B	Total/NA
Carbon disulfide	2.1		1.0	0.50	ug/L	1		8260B	Total/NA
Toluene	1.4		1.0	0.41	ug/L	1		8260B	Total/NA
Fluorene	0.038	J	0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.031	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	7.2	J B U	9.6	4.8	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.5	J	19	1.0	ug/L	1		8270D	Total/NA

Client Sample ID: MW10-ROX-071219 — Lab Sample ID: 400-173131-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.65	J	1.0	0.38	ug/L	1		8260B	Total/NA
Fluoranthene - RE	0.059	J H B UJ	0.20	0.020	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene - RE	0.048	J H J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Pyrene - RE	0.057	J H B UJ	0.20	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene - RE	0.021	J H J	0.20	0.020	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene - RE	0.032	J H J	0.20	0.020	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW5-ROX-071219 — Lab Sample ID: 400-173131-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	74		25	10	ug/L	1		8260B	Total/NA
Benzene	10		1.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	6.8		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.7		1.0	0.53	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.8		1.0	0.74	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	12		5.0	1.6	ug/L	1		8260B	Total/NA
N-Propylbenzene	2.7		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	2.0	J	5.0	0.60	ug/L	1		8260B	Total/NA
tert-Butylbenzene	2.3		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	6.6		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	14		10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.51		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene - RE	0.62	H J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Di-n-octyl phthalate - RERA	0.52	J H J	9.6	0.42	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZE-ROX-071219 — Lab Sample ID: 400-173131-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	380		25	10	ug/L	1		8260B	Total/NA
Benzene	110		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	9.9	J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene	130		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	7.6		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	210		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	94		1.0	1.0	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZE-ROX-071219 (Continued)

Lab Sample ID: 400-173131-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
N-Propylbenzene	9.1		1.0	0.69	ug/L	1		8260B	Total/NA
sec-Butylbenzene	0.98	J	1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	29		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	100		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	19		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	210		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	2.7	H	0.98	0.098	ug/L	5		8270D LL	Total/NA
Anthracene	2.0		2.0	0.20	ug/L	10		8270D LL	Total/NA
Anthracene	2.0	H	0.98	0.098	ug/L	5		8270D LL	Total/NA
Chrysene	0.28	J H	0.98	0.20	ug/L	5		8270D LL	Total/NA
Fluoranthene	0.44	J H	0.98	0.098	ug/L	5		8270D LL	Total/NA
Fluorene	2.5	H	0.98	0.10	ug/L	5		8270D LL	Total/NA
Phenanthrene	11		2.0	0.20	ug/L	10		8270D LL	Total/NA
Phenanthrene	10	H	0.98	0.098	ug/L	5		8270D LL	Total/NA
Pyrene	1.6	J	2.0	0.20	ug/L	10		8270D LL	Total/NA
Pyrene	1.2	H	0.98	0.098	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene	59		2.0	0.20	ug/L	10		8270D LL	Total/NA
1-Methylnaphthalene	48	H	0.98	0.098	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	46		2.0	0.20	ug/L	10		8270D LL	Total/NA
2-Methylnaphthalene	21	H	0.98	0.098	ug/L	5		8270D LL	Total/NA
Phenol - RERA	26	H	9.8	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZC-ROX-071219

Lab Sample ID: 400-173131-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	380		25	10	ug/L	1		8260B	Total/NA
Benzene	7.7		1.0	0.38	ug/L	1		8260B	Total/NA
Carbon disulfide	0.59	J	1.0	0.50	ug/L	1		8260B	Total/NA
Ethylbenzene	120		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	6.4		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	190		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	92		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	0.80	J	1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	12		1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	0.80	J	1.0	0.71	ug/L	1		8260B	Total/NA
Toluene	14		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	28		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	10		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	190		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	1.7	J	1.9	0.19	ug/L	10		8270D LL	Total/NA
Acenaphthene	2.4	H	0.97	0.097	ug/L	5		8270D LL	Total/NA
Anthracene	0.50	J H	0.97	0.097	ug/L	5		8270D LL	Total/NA
Fluorene	1.4	J	1.9	0.20	ug/L	10		8270D LL	Total/NA
Fluorene	1.6	H	0.97	0.10	ug/L	5		8270D LL	Total/NA
Phenanthrene	3.8		1.9	0.19	ug/L	10		8270D LL	Total/NA
Phenanthrene	4.1	H	0.97	0.097	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene	66		1.9	0.19	ug/L	10		8270D LL	Total/NA
1-Methylnaphthalene	72	H	0.97	0.097	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	59		1.9	0.19	ug/L	10		8270D LL	Total/NA
2-Methylnaphthalene	66	H	0.97	0.097	ug/L	5		8270D LL	Total/NA
Dibenzofuran	1.6	J	9.6	0.50	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZC-ROX-071219 (Continued)

Lab Sample ID: 400-173131-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,6-Dinitro-ortho-cresol	3.6	J	9.6	1.9	ug/L	1		8270D	Total/NA
Indene	1.2	J	9.6	0.96	ug/L	1		8270D	Total/NA
Dibenzofuran - RERA	0.94	J H	9.7	0.50	ug/L	1		8270D	Total/NA
Indene - RERA	1.5	J H	9.7	0.97	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-071219-8260-B

Lab Sample ID: 400-173131-8

No Detections.

Client Sample ID: TB-ROX-071219-8011-B

Lab Sample ID: 400-173131-9

No Detections.

Client Sample ID: P74-ROX-071219-EB

Lab Sample ID: 400-173131-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.6	J	25	2.6	ug/L	1		8260B	Total/NA
Phenanthrene	0.027	J H	0.20	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.026	J H	0.20	0.020	ug/L	1		8270D LL	Total/NA

Client Sample ID: P74-ROX-071219-

Lab Sample ID: 400-173131-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.5		1.0	0.38	ug/L	1		8260B	Total/NA
Toluene	1.1		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	2.0		1.0	0.82	ug/L	1		8260B	Total/NA
Fluoranthene	0.022	J H	0.20	0.020	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	1.0	J	9.6	0.67	ug/L	1		8270D	Total/NA

Client Sample ID: P93C-ROX-071219

Lab Sample ID: 400-173131-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.2		1.0	0.74	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.054	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P93D-ROX-071219

Lab Sample ID: 400-173131-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.2		1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.0		1.0	0.74	ug/L	1		8260B	Total/NA
Toluene	0.48	J	1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: P93B-ROX-071219

Lab Sample ID: 400-173131-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	320		250	100	ug/L	250		8260B	Total/NA
Benzene - DL	170000		1000	380	ug/L	1000		8260B	Total/NA
Phenol	13		9.7	2.5	ug/L	1		8270D	Total/NA
Phenol - RERA	260	H	98	25	ug/L	10		8270D	Total/NA

Client Sample ID: P93B-ROX-071219-DUP

Lab Sample ID: 400-173131-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	360		250	100	ug/L	250		8260B	Total/NA
Benzene - DL	220000		1000	380	ug/L	1000		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P93B-ROX-071219-DUP (Continued)

Lab Sample ID: 400-173131-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol - DL	200		49	13	ug/L	5		8270D	Total/NA
Phenol - RERA	240	H J	99	26	ug/L	10		8270D	Total/NA

Client Sample ID: P56-ROX-071219

Lab Sample ID: 400-173131-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	99		25	10	ug/L	1		8260B	Total/NA
Benzene	6.4		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	110		25	2.6	ug/L	1		8260B	Total/NA
Carbon disulfide	0.90	J	1.0	0.50	ug/L	1		8260B	Total/NA
Ethylbenzene	180		1.0	0.50	ug/L	1		8260B	Total/NA
Ethyl methacrylate	4.0		1.0	0.60	ug/L	1		8260B	Total/NA
Isopropylbenzene	29		1.0	0.53	ug/L	1		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	18	J	25	1.8	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	210		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	27		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	2.4		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	39		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	6.4		5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.9		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.6		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	7.9		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	83		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	21		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	220		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.58	J H J	0.99	0.099	ug/L	5		8270D LL	Total/NA
Anthracene	0.21	J H J	0.99	0.099	ug/L	5		8270D LL	Total/NA
Anthracene	0.22	J	0.97	0.097	ug/L	5		8270D LL	Total/NA
Fluorene	0.61	J H J	0.99	0.10	ug/L	5		8270D LL	Total/NA
Fluorene	0.43	J	0.97	0.10	ug/L	5		8270D LL	Total/NA
Phenanthrene	1.5	H J	0.99	0.099	ug/L	5		8270D LL	Total/NA
Phenanthrene	1.8		0.97	0.097	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene	32	H B J	0.99	0.099	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene	36		0.97	0.097	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	25	H B J	0.99	0.099	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	30		0.97	0.097	ug/L	5		8270D LL	Total/NA
3 & 4 Methylphenol - DL	940		390	20	ug/L	20		8270D	Total/NA
Di-n-octyl phthalate - RERA	1.2	J H J	9.9	0.43	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol - RERA	1800	H J	390	20	ug/L	20		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-173131-1

Client Sample ID: TB-ROX-071219-8011-A
Date Collected: 07/12/19 08:00
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		07/22/19 13:44	07/23/19 02:48	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/22/19 13:44	07/23/19 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/22/19 13:44*	*07/23/19 02:48*	*1*

Client Sample ID: TB-ROX-071219-8026-A
Date Collected: 07/12/19 08:00
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/20/19 13:54	1
Acrolein	ND		20	10	ug/L			07/20/19 13:54	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 13:54	1
Benzene	ND		1.0	0.38	ug/L			07/20/19 13:54	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 13:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 13:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 13:54	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 13:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 13:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 13:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 13:54	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 13:54	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 13:54	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 13:54	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 13:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 13:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 13:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 13:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 13:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 13:54	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 13:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 13:54	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 13:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 13:54	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 13:54	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 13:54	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 13:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 13:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 13:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 13:54	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 13:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 13:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 13:54	1

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

Job ID: 400-173131-1

Client Sample ID: TB-ROX-071219-8026-A
Date Collected: 07/12/19 08:00
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/19 13:54	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 13:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 13:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 13:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 13:54	1
Toluene	ND		1.0	0.41	ug/L			07/20/19 13:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 13:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 13:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 13:54	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 13:54	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 13:54	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 13:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 13:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 13:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 13:54	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 13:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 13:54	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*07/20/19 13:54*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*07/20/19 13:54*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 13:54*	*1*

Client Sample ID: ROST4PZG-ROX-071219
Date Collected: 07/12/19 08:50
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-3
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			07/20/19 15:13	1
Acrolein	ND		20	10	ug/L			07/20/19 15:13	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 15:13	1
Benzene	ND		1.0	0.38	ug/L			07/20/19 15:13	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 15:13	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 15:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 15:13	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 15:13	1
2-Butanone (MEK)	**5.0**	**J**	25	2.6	ug/L			07/20/19 15:13	1
Carbon disulfide	**2.1**		1.0	0.50	ug/L			07/20/19 15:13	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 15:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 15:13	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 15:13	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 15:13	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 15:13	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 15:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 15:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 15:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 15:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 15:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 15:13	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 15:13	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 15:13	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 15:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 15:13	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 15:13	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 15:13	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 15:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 15:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 15:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 15:13	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 15:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 15:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 15:13	1

Client Sample ID: ROST4PZG-ROX-071219
Date Collected: 07/12/19 08:50
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-3
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			07/20/19 15:13	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 15:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 15:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 15:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 15:13	1
Toluene	**1.4**		1.0	0.41	ug/L			07/20/19 15:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 15:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 15:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 15:13	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 15:13	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 15:13	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 15:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 15:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 15:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 15:13	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 15:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 15:13	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*07/20/19 15:13*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/20/19 15:13*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/20/19 15:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Chrysene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
Fluorene	**0.038**	**J**	0.19	0.020	ug/L		07/17/19 23:24	08/05/19 15:29	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/17/19 23:24	08/05/19 15:29	1
Phenanthrene	**0.031**	**J**	0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 23:24	08/05/19 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*48*		*33 - 138*	*07/17/19 23:24*	*08/05/19 15:29*	*1*
2-Fluorobiphenyl	*51*		*15 - 122*	*07/17/19 23:24*	*08/05/19 15:29*	*1*

Client Sample ID: ROST4PZG-ROX-071219
Date Collected: 07/12/19 08:50
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	53		19 - 130	07/17/19 23:24	08/05/19 15:29	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		07/17/19 23:24	07/22/19 21:44	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/17/19 23:24	07/22/19 21:44	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 23:24	07/22/19 21:44	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 23:24	07/22/19 21:44	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/17/19 23:24	07/22/19 21:44	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/17/19 23:24	07/22/19 21:44	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/17/19 23:24	07/22/19 21:44	1
Bis(2-ethylhexyl) phthalate	~~7.2~~	J B	9.6	4.8	ug/L		07/17/19 23:24	07/22/19 21:44	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 23:24	07/22/19 21:44	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/17/19 23:24	07/22/19 21:44	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 23:24	07/22/19 21:44	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/17/19 23:24	07/22/19 21:44	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 23:24	07/22/19 21:44	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 23:24	07/22/19 21:44	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 23:24	07/22/19 21:44	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/17/19 23:24	07/22/19 21:44	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/17/19 23:24	07/22/19 21:44	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 23:24	07/22/19 21:44	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/17/19 23:24	07/22/19 21:44	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/17/19 23:24	07/22/19 21:44	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 23:24	07/22/19 21:44	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 23:24	07/22/19 21:44	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/17/19 23:24	07/22/19 21:44	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/17/19 23:24	07/22/19 21:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/17/19 23:24	07/22/19 21:44	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 23:24	07/22/19 21:44	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 23:24	07/22/19 21:44	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 23:24	07/22/19 21:44	1
Indene	ND		9.6	0.96	ug/L		07/17/19 23:24	07/22/19 21:44	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 23:24	07/22/19 21:44	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 23:24	07/22/19 21:44	1
3 & 4 Methylphenol	1.5	J	19	1.0	ug/L		07/17/19 23:24	07/22/19 21:44	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 23:24	07/22/19 21:44	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 23:24	07/22/19 21:44	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 23:24	07/22/19 21:44	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 23:24	07/22/19 21:44	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/17/19 23:24	07/22/19 21:44	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 23:24	07/22/19 21:44	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/17/19 23:24	07/22/19 21:44	1

Client Sample ID: ROST4PZG-ROX-071219
Date Collected: 07/12/19 08:50
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-3
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		07/17/19 23:24	07/22/19 21:44	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 23:24	07/22/19 21:44	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 23:24	07/22/19 21:44	1
Phenol	ND		9.6	2.5	ug/L		07/17/19 23:24	07/22/19 21:44	1
Pyridine	ND		9.6	3.1	ug/L		07/17/19 23:24	07/22/19 21:44	1
Quinoline	ND		9.6	5.8	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/17/19 23:24	07/22/19 21:44	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/17/19 23:24	07/22/19 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*34 - 120*	*07/17/19 23:24*	*07/22/19 21:44*	*1*
2-Fluorophenol	*38*		*10 - 120*	*07/17/19 23:24*	*07/22/19 21:44*	*1*
Nitrobenzene-d5	*58*		*27 - 120*	*07/17/19 23:24*	*07/22/19 21:44*	*1*
Phenol-d5	*46*		*10 - 120*	*07/17/19 23:24*	*07/22/19 21:44*	*1*
Terphenyl-d14	*63*		*53 - 125*	*07/17/19 23:24*	*07/22/19 21:44*	*1*
2,4,6-Tribromophenol	*125*		*15 - 135*	*07/17/19 23:24*	*07/22/19 21:44*	*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		0.029	0.0054	ug/L		07/22/19 13:44	07/23/19 03:11	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/22/19 13:44	07/23/19 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*07/22/19 13:44*	*07/23/19 03:11*	*1*

Client Sample ID: MW10-ROX-071219
Date Collected: 07/12/19 09:40
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-4
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			07/20/19 15:39	1
Acrolein	ND		20	10	ug/L			07/20/19 15:39	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 15:39	1
Benzene	**0.65**	**J**	1.0	0.38	ug/L			07/20/19 15:39	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 15:39	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 15:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 15:39	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 15:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 15:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 15:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 15:39	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 15:39	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 15:39	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 15:39	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 15:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 15:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 15:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 15:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 15:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 15:39	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 15:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 15:39	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 15:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 15:39	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 15:39	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 15:39	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 15:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 15:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 15:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 15:39	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 15:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 15:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 15:39	1

Client Sample ID: MW10-ROX-071219
Date Collected: 07/12/19 09:40
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-4
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			07/20/19 15:39	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 15:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 15:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 15:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 15:39	1
Toluene	ND		1.0	0.41	ug/L			07/20/19 15:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 15:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 15:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 15:39	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 15:39	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 15:39	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 15:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 15:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 15:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 15:39	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 15:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 15:39	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/20/19 15:39*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*07/20/19 15:39*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/20/19 15:39*	*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		07/17/19 14:25	07/31/19 13:32	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1
Anthracene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1
Benzo[a]anthracene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Benzo[g,h,i]perylene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Benzo[k]fluoranthene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Chrysene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Dibenz(a,h)anthracene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Fluoranthene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1
Fluorene	ND		0.20	0.021	ug/L		07/17/19 14:25	07/31/19 13:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.041	ug/L		07/17/19 14:25	07/31/19 13:32	1
Phenanthrene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1
Pyrene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*07/31/19 13:32*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 13:32*	*1*

Client Sample ID: MW10-ROX-071219
Date Collected: 07/12/19 09:40
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	X	19 - 130	07/17/19 14:25	07/31/19 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
Acenaphthylene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
Anthracene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
Benzo[a]anthracene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Benzo[a]pyrene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Benzo[b]fluoranthene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Benzo[g,h,i]perylene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Benzo[k]fluoranthene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Chrysene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Dibenz(a,h)anthracene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Fluoranthene	0.059	J H B	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
Fluorene	ND	H	0.20	0.021	ug/L		07/24/19 22:20	08/01/19 16:18	1
Indeno[1,2,3-cd]pyrene	0.048	J H	0.20	0.040	ug/L		07/24/19 22:20	08/01/19 16:18	1
Phenanthrene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
Pyrene	0.057	J H B	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
1-Methylnaphthalene	0.021	J H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1
2-Methylnaphthalene	0.032	J H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	124		33 - 138	07/24/19 22:20	08/01/19 16:18	1
2-Fluorobiphenyl	97		15 - 122	07/24/19 22:20	08/01/19 16:18	1
Nitrobenzene-d5	105		19 - 130	07/24/19 22:20	08/01/19 16:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/17/19 14:25	07/20/19 20:59	1
Benzenethiol	ND	*	10	1.7	ug/L		07/17/19 14:25	07/20/19 20:59	1
Benzoic acid	ND		30	7.4	ug/L		07/17/19 14:25	07/20/19 20:59	1
Benzyl alcohol	ND		10	2.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/17/19 14:25	07/20/19 20:59	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		07/17/19 14:25	07/20/19 20:59	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/17/19 14:25	07/20/19 20:59	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/17/19 14:25	07/20/19 20:59	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/17/19 14:25	07/20/19 20:59	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/17/19 14:25	07/20/19 20:59	1
4-Chloroaniline	ND		10	3.4	ug/L		07/17/19 14:25	07/20/19 20:59	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/17/19 14:25	07/20/19 20:59	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/17/19 14:25	07/20/19 20:59	1
2-Chlorophenol	ND		10	2.2	ug/L		07/17/19 14:25	07/20/19 20:59	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
Dibenz[a,h]acridine	ND	*	10	3.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
Dibenzofuran	ND		10	0.53	ug/L		07/17/19 14:25	07/20/19 20:59	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
Diethyl phthalate	ND		10	0.71	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/17/19 14:25	07/20/19 20:59	1

Client Sample ID: MW10-ROX-071219
Date Collected: 07/12/19 09:40
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.61	ug/L		07/17/19 14:25	07/20/19 20:59	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/17/19 14:25	07/20/19 20:59	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 14:25	07/20/19 20:59	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		07/17/19 14:25	07/20/19 20:59	1
1,4-Dioxane	ND		10	1.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/17/19 14:25	07/20/19 20:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/17/19 14:25	07/20/19 20:59	1
Hexachloroethane	ND		10	4.3	ug/L		07/17/19 14:25	07/20/19 20:59	1
Indene	ND		10	1.0	ug/L		07/17/19 14:25	07/20/19 20:59	1
Isophorone	ND		10	0.58	ug/L		07/17/19 14:25	07/20/19 20:59	1
2-Methylphenol	ND		10	1.8	ug/L		07/17/19 14:25	07/20/19 20:59	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/17/19 14:25	07/20/19 20:59	1
2-Nitroaniline	ND		10	2.2	ug/L		07/17/19 14:25	07/20/19 20:59	1
3-Nitroaniline	ND		10	1.8	ug/L		07/17/19 14:25	07/20/19 20:59	1
4-Nitroaniline	ND		10	2.5	ug/L		07/17/19 14:25	07/20/19 20:59	1
Nitrobenzene	ND		10	0.56	ug/L		07/17/19 14:25	07/20/19 20:59	1
2-Nitrophenol	ND		10	0.66	ug/L		07/17/19 14:25	07/20/19 20:59	1
4-Nitrophenol	ND		10	2.1	ug/L		07/17/19 14:25	07/20/19 20:59	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/17/19 14:25	07/20/19 20:59	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/17/19 14:25	07/20/19 20:59	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		07/17/19 14:25	07/20/19 20:59	1
Pentachlorophenol	ND		20	1.8	ug/L		07/17/19 14:25	07/20/19 20:59	1
Phenol	ND		10	2.6	ug/L		07/17/19 14:25	07/20/19 20:59	1
Pyridine	ND		10	3.2	ug/L		07/17/19 14:25	07/20/19 20:59	1
Quinoline	ND		10	6.1	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/17/19 14:25	07/20/19 20:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/17/19 14:25	07/20/19 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 20:59*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 20:59*	*1*
Nitrobenzene-d5	*0*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 20:59*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 20:59*	*1*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/20/19 20:59*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 20:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	10	3.8	ug/L		07/24/19 22:20	07/31/19 01:34	1
Benzenethiol	ND	H *	10	1.7	ug/L		07/24/19 22:20	07/31/19 01:34	1
Benzoic acid	ND	H	30	7.3	ug/L		07/24/19 22:20	07/31/19 01:34	1
Benzyl alcohol	ND	H	10	2.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
Bis(2-chloroethoxy)methane	ND	H	10	0.69	ug/L		07/24/19 22:20	07/31/19 01:34	1
Bis(2-chloroethyl)ether	ND	H	10	0.74	ug/L		07/24/19 22:20	08/01/19 20:57	1
bis (2-chloroisopropyl) ether	ND	H	10	0.81	ug/L		07/24/19 22:20	08/01/19 20:57	1

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

Job ID: 400-173131-1

Client Sample ID: MW10-ROX-071219
Date Collected: 07/12/19 09:40
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	10	5.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
4-Bromophenyl phenyl ether	ND	H	10	0.32	ug/L		07/24/19 22:20	08/01/19 20:57	1
Butyl benzyl phthalate	ND	H	10	0.69	ug/L		07/24/19 22:20	07/31/19 01:34	1
4-Chloroaniline	ND	H	10	3.4	ug/L		07/24/19 22:20	07/31/19 01:34	1
4-Chloro-3-methylphenol	ND	H	10	3.8	ug/L		07/24/19 22:20	07/31/19 01:34	1
2-Chloronaphthalene	ND	H	10	0.52	ug/L		07/24/19 22:20	08/01/19 20:57	1
2-Chlorophenol	ND	H	10	2.2	ug/L		07/24/19 22:20	07/31/19 01:34	1
4-Chlorophenyl phenyl ether	ND	H	10	2.0	ug/L		07/24/19 22:20	08/01/19 20:57	1
Dibenz[a,h]acridine	ND	H	10	3.0	ug/L		07/24/19 22:20	08/01/19 20:57	1
Dibenzofuran	ND	H	10	0.52	ug/L		07/24/19 22:20	08/01/19 20:57	1
3,3'-Dichlorobenzidine	ND	H	10	2.6	ug/L		07/24/19 22:20	07/31/19 01:34	1
2,4-Dichlorophenol	ND	H	10	3.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
Diethyl phthalate	ND	H	10	0.70	ug/L		07/24/19 22:20	07/31/19 01:34	1
2,4-Dimethylphenol	ND	H	10	3.5	ug/L		07/24/19 22:20	07/31/19 01:34	1
Dimethyl phthalate	ND	H	10	0.60	ug/L		07/24/19 22:20	08/01/19 20:57	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		07/24/19 22:20	07/31/19 01:34	1
4,6-Dinitro-ortho-cresol	ND	H	10	2.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		07/24/19 22:20	07/31/19 01:34	1
2,4-Dinitrotoluene	ND	H	10	1.9	ug/L		07/24/19 22:20	08/01/19 20:57	1
2,6-Dinitrotoluene	ND	H	10	1.9	ug/L		07/24/19 22:20	08/01/19 20:57	1
Di-n-octyl phthalate	ND	H	10	0.44	ug/L		07/24/19 22:20	07/31/19 01:34	1
1,4-Dioxane	ND	H	10	1.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	10	1.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
Hexachlorobenzene	ND	H	10	0.25	ug/L		07/24/19 22:20	08/01/19 20:57	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		07/24/19 22:20	08/01/19 20:57	1
Hexachloroethane	ND	H	10	4.2	ug/L		07/24/19 22:20	07/31/19 01:34	1
Indene	ND	H	10	1.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
Isophorone	ND	H	10	0.57	ug/L		07/24/19 22:20	07/31/19 01:34	1
2-Methylphenol	ND	H	10	1.8	ug/L		07/24/19 22:20	07/31/19 01:34	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/24/19 22:20	07/31/19 01:34	1
2-Nitroaniline	ND	H	10	2.2	ug/L		07/24/19 22:20	07/31/19 01:34	1
3-Nitroaniline	ND	H	10	1.8	ug/L		07/24/19 22:20	07/31/19 01:34	1
4-Nitroaniline	ND	H	10	2.5	ug/L		07/24/19 22:20	07/31/19 01:34	1
Nitrobenzene	ND	H	10	0.55	ug/L		07/24/19 22:20	07/31/19 01:34	1
2-Nitrophenol	ND	H	10	0.65	ug/L		07/24/19 22:20	07/31/19 01:34	1
4-Nitrophenol	ND	H	10	2.1	ug/L		07/24/19 22:20	07/31/19 01:34	1
N-Nitrosodimethylamine	ND	H	10	3.5	ug/L		07/24/19 22:20	07/31/19 01:34	1
N-Nitrosodi-n-propylamine	ND	H	10	3.3	ug/L		07/24/19 22:20	07/31/19 01:34	1
N-Nitrosodiphenylamine	ND	H	10	0.47	ug/L		07/24/19 22:20	07/31/19 01:34	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/24/19 22:20	07/31/19 01:34	1
Phenol	ND	H	10	2.6	ug/L		07/24/19 22:20	07/31/19 01:34	1
Pyridine	ND	H	10	3.2	ug/L		07/24/19 22:20	07/31/19 01:34	1
Quinoline	ND	H	10	6.0	ug/L		07/24/19 22:20	08/01/19 20:57	1
2,4,5-Trichlorophenol	ND	H	10	3.7	ug/L		07/24/19 22:20	08/01/19 20:57	1
2,4,6-Trichlorophenol	ND	H	10	3.5	ug/L		07/24/19 22:20	08/01/19 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*34 - 120*	*07/24/19 22:20*	*07/31/19 01:34*	*1*
2-Fluorophenol	*47*		*10 - 120*	*07/24/19 22:20*	*07/31/19 01:34*	*1*

Client Sample ID: MW10-ROX-071219
Date Collected: 07/12/19 09:40
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*89*		*27 - 120*	*07/24/19 22:20*	*07/31/19 01:34*	*1*
Phenol-d5	*68*		*10 - 120*	*07/24/19 22:20*	*07/31/19 01:34*	*1*
Terphenyl-d14	*64*		*53 - 125*	*07/24/19 22:20*	*07/31/19 01:34*	*1*
2,4,6-Tribromophenol	*39*		*15 - 135*	*07/24/19 22:20*	*07/31/19 01:34*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		07/22/19 13:44	07/23/19 03:33	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/22/19 13:44	07/23/19 03:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*95*		*51 - 149*	*07/22/19 13:44*	*07/23/19 03:33*	*1*

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

Job ID: 400-173131-1

Client Sample ID: MW5-ROX-071219
Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**74**		25	10	ug/L			07/20/19 16:05	1
Acrolein	ND		20	10	ug/L			07/20/19 16:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 16:05	1
Benzene	**10**		1.0	0.38	ug/L			07/20/19 16:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 16:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 16:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 16:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 16:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 16:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 16:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 16:05	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 16:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 16:05	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 16:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 16:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 16:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 16:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 16:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Ethylbenzene	**6.8**		1.0	0.50	ug/L			07/20/19 16:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 16:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 16:05	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 16:05	1
Isopropylbenzene	**2.7**		1.0	0.53	ug/L			07/20/19 16:05	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 16:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 16:05	1
Methyl tert-butyl ether	**2.8**		1.0	0.74	ug/L			07/20/19 16:05	1
m-Xylene & p-Xylene	**12**		5.0	1.6	ug/L			07/20/19 16:05	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 16:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 16:05	1
N-Propylbenzene	**2.7**		1.0	0.69	ug/L			07/20/19 16:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 16:05	1
o-Xylene	**2.0**	**J**	5.0	0.60	ug/L			07/20/19 16:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 16:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 16:05	1

Client Sample ID: MW5-ROX-071219
Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
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			07/20/19 16:05	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 16:05	1
tert-Butylbenzene	**2.3**		1.0	0.63	ug/L			07/20/19 16:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 16:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 16:05	1
Toluene	**6.6**		1.0	0.41	ug/L			07/20/19 16:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 16:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 16:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 16:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 16:05	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 16:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 16:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 16:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 16:05	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 16:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 16:05	1
Xylenes, Total	**14**		10	1.6	ug/L			07/20/19 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/20/19 16:05*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/20/19 16:05*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 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		07/17/19 14:25	07/31/19 13:50	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Chrysene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 14:25	07/31/19 13:50	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 13:50	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1
1-Methylnaphthalene	**0.51**		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*07/31/19 13:50*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 13:50*	*1*

Client Sample ID: MW5-ROX-071219
Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	X	19 - 130	07/17/19 14:25	07/31/19 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
Acenaphthylene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
Anthracene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
Benzo[a]anthracene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Benzo[a]pyrene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Benzo[b]fluoranthene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Benzo[g,h,i]perylene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Benzo[k]fluoranthene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Chrysene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Dibenz(a,h)anthracene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Fluoranthene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
Fluorene	ND	H	0.19	0.020	ug/L		07/24/19 22:20	08/01/19 16:35	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.038	ug/L		07/24/19 22:20	08/01/19 16:35	1
Phenanthrene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
Pyrene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
1-Methylnaphthalene	**0.62**	**H**	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1
2-Methylnaphthalene	ND	H	0.19	0.019	ug/L		07/24/19 22:20	08/01/19 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	79		33 - 138	07/24/19 22:20	08/01/19 16:35	1
2-Fluorobiphenyl	91		15 - 122	07/24/19 22:20	08/01/19 16:35	1
Nitrobenzene-d5	84		19 - 130	07/24/19 22:20	08/01/19 16:35	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		07/17/19 14:25	07/20/19 21:20	1
Benzenethiol	ND	*	9.7	1.6	ug/L		07/17/19 14:25	07/20/19 21:20	1
Benzoic acid	ND		29	7.1	ug/L		07/17/19 14:25	07/20/19 21:20	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/17/19 14:25	07/20/19 21:20	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/17/19 14:25	07/20/19 21:20	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		07/17/19 14:25	07/20/19 21:20	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		07/17/19 14:25	07/20/19 21:20	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/17/19 14:25	07/20/19 21:20	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/17/19 14:25	07/20/19 21:20	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/17/19 14:25	07/20/19 21:20	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/17/19 14:25	07/20/19 21:20	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/17/19 14:25	07/20/19 21:20	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		07/17/19 14:25	07/20/19 21:20	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/17/19 14:25	07/20/19 21:20	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/17/19 14:25	07/20/19 21:20	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		07/17/19 14:25	07/20/19 21:20	1
Dibenzofuran	ND		9.7	0.50	ug/L		07/17/19 14:25	07/20/19 21:20	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/17/19 14:25	07/20/19 21:20	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/17/19 14:25	07/20/19 21:20	1

Client Sample ID: MW5-ROX-071219
Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/17/19 14:25	07/20/19 21:20	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/17/19 14:25	07/20/19 21:20	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/17/19 14:25	07/20/19 21:20	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		07/17/19 14:25	07/20/19 21:20	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/17/19 14:25	07/20/19 21:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/17/19 14:25	07/20/19 21:20	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/17/19 14:25	07/20/19 21:20	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/20/19 21:20	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/17/19 14:25	07/20/19 21:20	1
Indene	ND		9.7	0.97	ug/L		07/17/19 14:25	07/20/19 21:20	1
Isophorone	ND		9.7	0.55	ug/L		07/17/19 14:25	07/20/19 21:20	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/17/19 14:25	07/20/19 21:20	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 14:25	07/20/19 21:20	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/17/19 14:25	07/20/19 21:20	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/17/19 14:25	07/20/19 21:20	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/17/19 14:25	07/20/19 21:20	1
Nitrobenzene	ND		9.7	0.53	ug/L		07/17/19 14:25	07/20/19 21:20	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/17/19 14:25	07/20/19 21:20	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/17/19 14:25	07/20/19 21:20	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/17/19 14:25	07/20/19 21:20	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/17/19 14:25	07/20/19 21:20	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		07/17/19 14:25	07/20/19 21:20	1
Pentachlorophenol	ND		19	1.8	ug/L		07/17/19 14:25	07/20/19 21:20	1
Phenol	ND		9.7	2.5	ug/L		07/17/19 14:25	07/20/19 21:20	1
Pyridine	ND		9.7	3.1	ug/L		07/17/19 14:25	07/20/19 21:20	1
Quinoline	ND		9.7	5.8	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/17/19 14:25	07/20/19 21:20	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/17/19 14:25	07/20/19 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 21:20*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:20*	*1*
Nitrobenzene-d5	*0*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 21:20*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:20*	*1*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/20/19 21:20*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 21:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.6	3.6	ug/L		07/24/19 22:20	08/03/19 13:13	1
Benzenethiol	ND	H	9.6	1.6	ug/L		07/24/19 22:20	08/03/19 13:13	1
Benzoic acid	ND	H	29	7.0	ug/L		07/24/19 22:20	08/03/19 13:13	1
Benzyl alcohol	ND	H	9.6	1.9	ug/L		07/24/19 22:20	08/03/19 13:13	1
Bis(2-chloroethoxy)methane	ND	H	9.6	0.66	ug/L		07/24/19 22:20	08/03/19 13:13	1
Bis(2-chloroethyl)ether	ND	H	9.6	0.71	ug/L		07/24/19 22:20	08/03/19 13:13	1
bis (2-chloroisopropyl) ether	ND	H	9.6	0.78	ug/L		07/24/19 22:20	08/03/19 13:13	1

Client Sample ID: MW5-ROX-071219
Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	9.6	4.8	ug/L		07/24/19 22:20	08/03/19 13:13	1
4-Bromophenyl phenyl ether	ND	H	9.6	0.31	ug/L		07/24/19 22:20	08/03/19 13:13	1
Butyl benzyl phthalate	ND	H	9.6	0.66	ug/L		07/24/19 22:20	08/03/19 13:13	1
4-Chloroaniline	ND	H	9.6	3.3	ug/L		07/24/19 22:20	08/03/19 13:13	1
4-Chloro-3-methylphenol	ND	H	9.6	3.6	ug/L		07/24/19 22:20	08/03/19 13:13	1
2-Chloronaphthalene	ND	H	9.6	0.50	ug/L		07/24/19 22:20	08/03/19 13:13	1
2-Chlorophenol	ND	H	9.6	2.1	ug/L		07/24/19 22:20	08/03/19 13:13	1
4-Chlorophenyl phenyl ether	ND	H	9.6	1.9	ug/L		07/24/19 22:20	08/03/19 13:13	1
Dibenz[a,h]acridine	ND	H	9.6	2.9	ug/L		07/24/19 22:20	08/03/19 13:13	1
Dibenzofuran	ND	H	9.6	0.50	ug/L		07/24/19 22:20	08/03/19 13:13	1
3,3'-Dichlorobenzidine	ND	H	9.6	2.5	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,4-Dichlorophenol	ND	H	9.6	2.9	ug/L		07/24/19 22:20	08/03/19 13:13	1
Diethyl phthalate	ND	H	9.6	0.67	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,4-Dimethylphenol	ND	H	9.6	3.4	ug/L		07/24/19 22:20	08/03/19 13:13	1
Dimethyl phthalate	ND	H	9.6	0.58	ug/L		07/24/19 22:20	08/03/19 13:13	1
Di-n-butyl phthalate	ND	H	9.6	2.6	ug/L		07/24/19 22:20	08/03/19 13:13	1
4,6-Dinitro-ortho-cresol	ND	H	9.6	1.9	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,4-Dinitrophenol	ND	H	29	3.3	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,4-Dinitrotoluene	ND	H	9.6	1.8	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,6-Dinitrotoluene	ND	H	9.6	1.8	ug/L		07/24/19 22:20	08/03/19 13:13	1
Di-n-octyl phthalate	**0.52**	**J H**	9.6	0.42	ug/L		07/24/19 22:20	08/03/19 13:13	1
1,4-Dioxane	ND	H	9.6	0.96	ug/L		07/24/19 22:20	08/03/19 13:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.6	0.96	ug/L		07/24/19 22:20	08/03/19 13:13	1
Hexachlorobenzene	ND	H	9.6	0.24	ug/L		07/24/19 22:20	08/03/19 13:13	1
Hexachlorocyclopentadiene	ND	H	19	2.5	ug/L		07/24/19 22:20	08/03/19 13:13	1
Hexachloroethane	ND	H	9.6	4.0	ug/L		07/24/19 22:20	08/03/19 13:13	1
Indene	ND	H	9.6	0.96	ug/L		07/24/19 22:20	08/03/19 13:13	1
Isophorone	ND	H	9.6	0.55	ug/L		07/24/19 22:20	08/03/19 13:13	1
2-Methylphenol	ND	H	9.6	1.7	ug/L		07/24/19 22:20	08/03/19 13:13	1
3 & 4 Methylphenol	ND	H	19	1.0	ug/L		07/24/19 22:20	08/03/19 13:13	1
2-Nitroaniline	ND	H	9.6	2.1	ug/L		07/24/19 22:20	08/03/19 13:13	1
3-Nitroaniline	ND	H	9.6	1.7	ug/L		07/24/19 22:20	08/03/19 13:13	1
4-Nitroaniline	ND	H	9.6	2.4	ug/L		07/24/19 22:20	08/03/19 13:13	1
Nitrobenzene	ND	H	9.6	0.53	ug/L		07/24/19 22:20	08/03/19 13:13	1
2-Nitrophenol	ND	H	9.6	0.62	ug/L		07/24/19 22:20	08/03/19 13:13	1
4-Nitrophenol	ND	H	9.6	2.0	ug/L		07/24/19 22:20	08/03/19 13:13	1
N-Nitrosodimethylamine	ND	H	9.6	3.4	ug/L		07/24/19 22:20	08/03/19 13:13	1
N-Nitrosodi-n-propylamine	ND	H	9.6	3.2	ug/L		07/24/19 22:20	08/03/19 13:13	1
N-Nitrosodiphenylamine	ND	H	9.6	0.45	ug/L		07/24/19 22:20	08/03/19 13:13	1
Pentachlorophenol	ND	H	19	1.7	ug/L		07/24/19 22:20	08/03/19 13:13	1
Phenol	ND	H	9.6	2.5	ug/L		07/24/19 22:20	08/03/19 13:13	1
Pyridine	ND	H	9.6	3.1	ug/L		07/24/19 22:20	08/03/19 13:13	1
Quinoline	ND	H	9.6	5.8	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,4,5-Trichlorophenol	ND	H	9.6	3.6	ug/L		07/24/19 22:20	08/03/19 13:13	1
2,4,6-Trichlorophenol	ND	H	9.6	3.4	ug/L		07/24/19 22:20	08/03/19 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*34 - 120*	*07/24/19 22:20*	*08/03/19 13:13*	*1*
2-Fluorophenol	*75*		*10 - 120*	*07/24/19 22:20*	*08/03/19 13:13*	*1*

Client Sample ID: MW5-ROX-071219
Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	88		27 - 120	07/24/19 22:20	08/03/19 13:13	1
Phenol-d5	81		10 - 120	07/24/19 22:20	08/03/19 13:13	1
Terphenyl-d14	70		53 - 125	07/24/19 22:20	08/03/19 13:13	1
2,4,6-Tribromophenol	105		15 - 135	07/24/19 22:20	08/03/19 13:13	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		07/22/19 13:44	07/23/19 04:18	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/22/19 13:44	07/23/19 04:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	120		51 - 149	07/22/19 13:44	07/23/19 04:18	1

Client Sample ID: ROST4PZE-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**380**		25	10	ug/L			07/20/19 16:32	1
Acrolein	ND		20	10	ug/L			07/20/19 16:32	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 16:32	1
Benzene	**110**		1.0	0.38	ug/L			07/20/19 16:32	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 16:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 16:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 16:32	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 16:32	1
2-Butanone (MEK)	**9.9**	**J**	25	2.6	ug/L			07/20/19 16:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 16:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 16:32	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 16:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 16:32	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 16:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 16:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 16:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 16:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 16:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Ethylbenzene	**130**		1.0	0.50	ug/L			07/20/19 16:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 16:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 16:32	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 16:32	1
Isopropylbenzene	**7.6**		1.0	0.53	ug/L			07/20/19 16:32	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 16:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 16:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 16:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 16:32	1
m-Xylene & p-Xylene	**210**		5.0	1.6	ug/L			07/20/19 16:32	1
Naphthalene	**94**		1.0	1.0	ug/L			07/20/19 16:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 16:32	1
N-Propylbenzene	**9.1**		1.0	0.69	ug/L			07/20/19 16:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 16:32	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 16:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 16:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 16:32	1

Client Sample ID: ROST4PZE-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**0.98**	**J**	1.0	0.70	ug/L			07/20/19 16:32	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 16:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 16:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 16:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 16:32	1
Toluene	**29**		1.0	0.41	ug/L			07/20/19 16:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 16:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 16:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 16:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 16:32	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 16:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 16:32	1
1,2,4-Trimethylbenzene	**100**		1.0	0.82	ug/L			07/20/19 16:32	1
1,3,5-Trimethylbenzene	**19**		1.0	0.56	ug/L			07/20/19 16:32	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 16:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 16:32	1
Xylenes, Total	**210**		10	1.6	ug/L			07/20/19 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/20/19 16:32*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/20/19 16:32*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/20/19 16:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
Acenaphthene	**2.7**	**H** J	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
Acenaphthylene	ND		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
Acenaphthylene	ND	H UJ	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
Anthracene	**2.0**		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
Anthracene	**2.0**	**H** J	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
Benzo[a]anthracene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Benzo[a]anthracene	ND	H UJ	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Benzo[a]pyrene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Benzo[a]pyrene	ND	H UJ	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Benzo[b]fluoranthene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Benzo[b]fluoranthene	ND	H UJ	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Benzo[g,h,i]perylene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Benzo[g,h,i]perylene	ND	H UJ	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Benzo[k]fluoranthene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Benzo[k]fluoranthene	ND	H UJ	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Chrysene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Chrysene	**0.28**	**J H** J	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Dibenz(a,h)anthracene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Dibenz(a,h)anthracene	ND	H UJ	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Fluoranthene	ND		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10

Client Sample ID: ROST4PZE-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.44	J H	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
Fluorene	ND		2.0	0.21	ug/L		07/17/19 14:25	07/31/19 14:08	10
Fluorene	2.5	H	0.98	0.10	ug/L		07/24/19 22:20	08/02/19 23:15	5
Indeno[1,2,3-cd]pyrene	ND		2.0	0.39	ug/L		07/17/19 14:25	07/31/19 14:08	10
Indeno[1,2,3-cd]pyrene	ND	H	0.98	0.20	ug/L		07/24/19 22:20	08/02/19 23:15	5
Phenanthrene	11		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
Phenanthrene	10	H	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
Pyrene	1.6	J	2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
Pyrene	1.2	H	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
1-Methylnaphthalene	59		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
1-Methylnaphthalene	48	H	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5
2-Methylnaphthalene	46		2.0	0.20	ug/L		07/17/19 14:25	07/31/19 14:08	10
2-Methylnaphthalene	21	H	0.98	0.098	ug/L		07/24/19 22:20	08/02/19 23:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*07/31/19 14:08*	*10*
Terphenyl-d14	*78*		*33 - 138*	*07/24/19 22:20*	*08/02/19 23:15*	*5*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 14:08*	*10*
2-Fluorobiphenyl	*71*		*15 - 122*	*07/24/19 22:20*	*08/02/19 23:15*	*5*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*07/31/19 14:08*	*10*
Nitrobenzene-d5	*94*		*19 - 130*	*07/24/19 22:20*	*08/02/19 23:15*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		49	19	ug/L		07/17/19 14:25	07/20/19 21:41	5
Benzenethiol	ND	*	49	8.4	ug/L		07/17/19 14:25	07/20/19 21:41	5
Benzoic acid	ND		150	36	ug/L		07/17/19 14:25	07/20/19 21:41	5
Benzyl alcohol	ND		49	9.8	ug/L		07/17/19 14:25	07/20/19 21:41	5
Bis(2-chloroethoxy)methane	ND		49	3.4	ug/L		07/17/19 14:25	07/20/19 21:41	5
Bis(2-chloroethyl)ether	ND		49	3.6	ug/L		07/17/19 14:25	07/20/19 21:41	5
bis (2-chloroisopropyl) ether	ND		49	4.0	ug/L		07/17/19 14:25	07/20/19 21:41	5
Bis(2-ethylhexyl) phthalate	ND		49	25	ug/L		07/17/19 14:25	07/20/19 21:41	5
4-Bromophenyl phenyl ether	ND		49	1.6	ug/L		07/17/19 14:25	07/20/19 21:41	5
Butyl benzyl phthalate	ND		49	3.4	ug/L		07/17/19 14:25	07/20/19 21:41	5
4-Chloroaniline	ND		49	17	ug/L		07/17/19 14:25	07/20/19 21:41	5
4-Chloro-3-methylphenol	ND		49	19	ug/L		07/17/19 14:25	07/20/19 21:41	5
2-Chloronaphthalene	ND		49	2.6	ug/L		07/17/19 14:25	07/20/19 21:41	5
2-Chlorophenol	ND		49	11	ug/L		07/17/19 14:25	07/20/19 21:41	5
4-Chlorophenyl phenyl ether	ND		49	9.8	ug/L		07/17/19 14:25	07/20/19 21:41	5
Dibenz[a,h]acridine	ND		49	15	ug/L		07/17/19 14:25	07/20/19 21:41	5
Dibenzofuran	ND		49	2.6	ug/L		07/17/19 14:25	07/20/19 21:41	5
3,3'-Dichlorobenzidine	ND	*	49	13	ug/L		07/17/19 14:25	07/20/19 21:41	5
2,4-Dichlorophenol	ND		49	15	ug/L		07/17/19 14:25	07/20/19 21:41	5
Diethyl phthalate	ND		49	3.4	ug/L		07/17/19 14:25	07/20/19 21:41	5
2,4-Dimethylphenol	ND		49	17	ug/L		07/17/19 14:25	07/20/19 21:41	5
Dimethyl phthalate	ND		49	3.0	ug/L		07/17/19 14:25	07/20/19 21:41	5
Di-n-butyl phthalate	ND		49	13	ug/L		07/17/19 14:25	07/20/19 21:41	5
4,6-Dinitro-ortho-cresol	ND		49	9.8	ug/L		07/17/19 14:25	07/20/19 21:41	5
2,4-Dinitrophenol	ND		150	17	ug/L		07/17/19 14:25	07/20/19 21:41	5
2,4-Dinitrotoluene	ND		49	9.3	ug/L		07/17/19 14:25	07/20/19 21:41	5

Client Sample ID: ROST4PZE-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		49	9.3	ug/L		07/17/19 14:25	07/20/19 21:41	5
Di-n-octyl phthalate	ND		49	2.2	ug/L		07/17/19 14:25	07/20/19 21:41	5
1,4-Dioxane	ND		49	4.9	ug/L		07/17/19 14:25	07/20/19 21:41	5
1,2-Diphenylhydrazine (as Azobenzene)	ND		49	4.9	ug/L		07/17/19 14:25	07/20/19 21:41	5
Hexachlorobenzene	ND		49	1.2	ug/L		07/17/19 14:25	07/20/19 21:41	5
Hexachlorocyclopentadiene	ND		98	13	ug/L		07/17/19 14:25	07/20/19 21:41	5
Hexachloroethane	ND		49	21	ug/L		07/17/19 14:25	07/20/19 21:41	5
Indene	ND		49	4.9	ug/L		07/17/19 14:25	07/20/19 21:41	5
Isophorone	ND		49	2.8	ug/L		07/17/19 14:25	07/20/19 21:41	5
2-Methylphenol	ND		49	8.9	ug/L		07/17/19 14:25	07/20/19 21:41	5
3 & 4 Methylphenol	ND		98	5.1	ug/L		07/17/19 14:25	07/20/19 21:41	5
2-Nitroaniline	ND		49	11	ug/L		07/17/19 14:25	07/20/19 21:41	5
3-Nitroaniline	ND		49	8.9	ug/L		07/17/19 14:25	07/20/19 21:41	5
4-Nitroaniline	ND		49	12	ug/L		07/17/19 14:25	07/20/19 21:41	5
Nitrobenzene	ND		49	2.7	ug/L		07/17/19 14:25	07/20/19 21:41	5
2-Nitrophenol	ND		49	3.2	ug/L		07/17/19 14:25	07/20/19 21:41	5
4-Nitrophenol	ND		49	10	ug/L		07/17/19 14:25	07/20/19 21:41	5
N-Nitrosodimethylamine	ND		49	17	ug/L		07/17/19 14:25	07/20/19 21:41	5
N-Nitrosodi-n-propylamine	ND		49	16	ug/L		07/17/19 14:25	07/20/19 21:41	5
N-Nitrosodiphenylamine	ND		49	2.3	ug/L		07/17/19 14:25	07/20/19 21:41	5
Pentachlorophenol	ND		98	8.9	ug/L		07/17/19 14:25	07/20/19 21:41	5
Phenol	ND		49	13	ug/L		07/17/19 14:25	07/20/19 21:41	5
Pyridine	ND		49	16	ug/L		07/17/19 14:25	07/20/19 21:41	5
Quinoline	ND		49	30	ug/L		07/17/19 14:25	07/20/19 21:41	5
2,4,5-Trichlorophenol	ND		49	18	ug/L		07/17/19 14:25	07/20/19 21:41	5
2,4,6-Trichlorophenol	ND		49	17	ug/L		07/17/19 14:25	07/20/19 21:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 21:41*	*5*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:41*	*5*
Nitrobenzene-d5	*0*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 21:41*	*5*
Phenol-d5	*2*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:41*	*5*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/20/19 21:41*	*5*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 21:41*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.8	3.7	ug/L		07/24/19 22:20	08/03/19 13:38	1
Benzenethiol	ND	H	9.8	1.7	ug/L		07/24/19 22:20	08/03/19 13:38	1
Benzoic acid	ND	H	29	7.1	ug/L		07/24/19 22:20	08/03/19 13:38	1
Benzyl alcohol	ND	H	9.8	2.0	ug/L		07/24/19 22:20	08/03/19 13:38	1
Bis(2-chloroethoxy)methane	ND	H	9.8	0.68	ug/L		07/24/19 22:20	08/03/19 13:38	1
Bis(2-chloroethyl)ether	ND	H	9.8	0.72	ug/L		07/24/19 22:20	08/03/19 13:38	1
bis (2-chloroisopropyl) ether	ND	H	9.8	0.79	ug/L		07/24/19 22:20	08/03/19 13:38	1
Bis(2-ethylhexyl) phthalate	ND	H	9.8	4.9	ug/L		07/24/19 22:20	08/03/19 13:38	1
4-Bromophenyl phenyl ether	ND	H	9.8	0.31	ug/L		07/24/19 22:20	08/03/19 13:38	1
Butyl benzyl phthalate	ND	H	9.8	0.68	ug/L		07/24/19 22:20	08/03/19 13:38	1
4-Chloroaniline	ND	H	9.8	3.3	ug/L		07/24/19 22:20	08/03/19 13:38	1
4-Chloro-3-methylphenol	ND	H	9.8	3.7	ug/L		07/24/19 22:20	08/03/19 13:38	1

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

Job ID: 400-173131-1

Client Sample ID: ROST4PZE-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND	H	9.8	0.51	ug/L		07/24/19 22:20	08/03/19 13:38	1
2-Chlorophenol	ND	H	9.8	2.2	ug/L		07/24/19 22:20	08/03/19 13:38	1
4-Chlorophenyl phenyl ether	ND	H	9.8	2.0	ug/L		07/24/19 22:20	08/03/19 13:38	1
Dibenz[a,h]acridine	ND	H	9.8	2.9	ug/L		07/24/19 22:20	08/03/19 13:38	1
Dibenzofuran	ND	H	9.8	0.51	ug/L		07/24/19 22:20	08/03/19 13:38	1
3,3'-Dichlorobenzidine	ND	H	9.8	2.5	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,4-Dichlorophenol	ND	H	9.8	2.9	ug/L		07/24/19 22:20	08/03/19 13:38	1
Diethyl phthalate	ND	H	9.8	0.69	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,4-Dimethylphenol	ND	H	9.8	3.4	ug/L		07/24/19 22:20	08/03/19 13:38	1
Dimethyl phthalate	ND	H	9.8	0.59	ug/L		07/24/19 22:20	08/03/19 13:38	1
Di-n-butyl phthalate	ND	H	9.8	2.6	ug/L		07/24/19 22:20	08/03/19 13:38	1
4,6-Dinitro-ortho-cresol	ND	H	9.8	2.0	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,4-Dinitrophenol	ND	H	29	3.3	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,4-Dinitrotoluene	ND	H	9.8	1.9	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,6-Dinitrotoluene	ND	H	9.8	1.9	ug/L		07/24/19 22:20	08/03/19 13:38	1
Di-n-octyl phthalate	ND	H	9.8	0.43	ug/L		07/24/19 22:20	08/03/19 13:38	1
1,4-Dioxane	ND	H	9.8	0.98	ug/L		07/24/19 22:20	08/03/19 13:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.8	0.98	ug/L		07/24/19 22:20	08/03/19 13:38	1
Hexachlorobenzene	ND	H	9.8	0.24	ug/L		07/24/19 22:20	08/03/19 13:38	1
Hexachlorocyclopentadiene	ND	H	20	2.5	ug/L		07/24/19 22:20	08/03/19 13:38	1
Hexachloroethane	ND	H	9.8	4.1	ug/L		07/24/19 22:20	08/03/19 13:38	1
Indene	ND	H	9.8	0.98	ug/L		07/24/19 22:20	08/03/19 13:38	1
Isophorone	ND	H	9.8	0.56	ug/L		07/24/19 22:20	08/03/19 13:38	1
2-Methylphenol	ND	H	9.8	1.8	ug/L		07/24/19 22:20	08/03/19 13:38	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/24/19 22:20	08/03/19 13:38	1
2-Nitroaniline	ND	H	9.8	2.2	ug/L		07/24/19 22:20	08/03/19 13:38	1
3-Nitroaniline	ND	H	9.8	1.8	ug/L		07/24/19 22:20	08/03/19 13:38	1
4-Nitroaniline	ND	H	9.8	2.4	ug/L		07/24/19 22:20	08/03/19 13:38	1
Nitrobenzene	ND	H	9.8	0.54	ug/L		07/24/19 22:20	08/03/19 13:38	1
2-Nitrophenol	ND	H	9.8	0.64	ug/L		07/24/19 22:20	08/03/19 13:38	1
4-Nitrophenol	ND	H	9.8	2.1	ug/L		07/24/19 22:20	08/03/19 13:38	1
N-Nitrosodimethylamine	ND	H	9.8	3.4	ug/L		07/24/19 22:20	08/03/19 13:38	1
N-Nitrosodi-n-propylamine	ND	H	9.8	3.2	ug/L		07/24/19 22:20	08/03/19 13:38	1
N-Nitrosodiphenylamine	ND	H	9.8	0.46	ug/L		07/24/19 22:20	08/03/19 13:38	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/24/19 22:20	08/03/19 13:38	1
Phenol	**26**	**H**	9.8	2.5	ug/L		07/24/19 22:20	08/03/19 13:38	1
Pyridine	ND	H	9.8	3.1	ug/L		07/24/19 22:20	08/03/19 13:38	1
Quinoline	ND	H	9.8	5.9	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,4,5-Trichlorophenol	ND	H	9.8	3.6	ug/L		07/24/19 22:20	08/03/19 13:38	1
2,4,6-Trichlorophenol	ND	H	9.8	3.4	ug/L		07/24/19 22:20	08/03/19 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*34 - 120*	*07/24/19 22:20*	*08/03/19 13:38*	*1*
2-Fluorophenol	*63*		*10 - 120*	*07/24/19 22:20*	*08/03/19 13:38*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*07/24/19 22:20*	*08/03/19 13:38*	*1*
Phenol-d5	*78*		*10 - 120*	*07/24/19 22:20*	*08/03/19 13:38*	*1*
Terphenyl-d14	*79*		*53 - 125*	*07/24/19 22:20*	*08/03/19 13:38*	*1*
2,4,6-Tribromophenol	*104*		*15 - 135*	*07/24/19 22:20*	*08/03/19 13:38*	*1*

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

Job ID: 400-173131-1

Client Sample ID: ROST4PZE-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.0060	ug/L		07/22/19 13:44	07/23/19 04:40	1
1,2-Dibromoethane	ND		0.022	0.0054	ug/L		07/22/19 13:44	07/23/19 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*07/22/19 13:44*	*07/23/19 04:40*	*1*

Client Sample ID: ROST4PZC-ROX-071219
Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**380**		25	10	ug/L			07/20/19 16:58	1
Acrolein	ND		20	10	ug/L			07/20/19 16:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 16:58	1
Benzene	**7.7**		1.0	0.38	ug/L			07/20/19 16:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 16:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 16:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 16:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 16:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 16:58	1
Carbon disulfide	**0.59**	**J**	1.0	0.50	ug/L			07/20/19 16:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 16:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 16:58	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 16:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 16:58	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 16:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 16:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 16:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 16:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 16:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Ethylbenzene	**120**		1.0	0.50	ug/L			07/20/19 16:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 16:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 16:58	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 16:58	1
Isopropylbenzene	**6.4**		1.0	0.53	ug/L			07/20/19 16:58	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 16:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 16:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 16:58	1
m-Xylene & p-Xylene	**190**		5.0	1.6	ug/L			07/20/19 16:58	1
Naphthalene	**92**		1.0	1.0	ug/L			07/20/19 16:58	1
n-Butylbenzene	**0.80**	**J**	1.0	0.76	ug/L			07/20/19 16:58	1
N-Propylbenzene	**12**		1.0	0.69	ug/L			07/20/19 16:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 16:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 16:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 16:58	1
p-Isopropyltoluene	**0.80**	**J**	1.0	0.71	ug/L			07/20/19 16:58	1

Client Sample ID: ROST4PZC-ROX-071219
Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
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			07/20/19 16:58	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 16:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 16:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 16:58	1
Toluene	**14**		1.0	0.41	ug/L			07/20/19 16:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 16:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 16:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 16:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 16:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 16:58	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 16:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 16:58	1
1,2,4-Trimethylbenzene	**28**		1.0	0.82	ug/L			07/20/19 16:58	1
1,3,5-Trimethylbenzene	**10**		1.0	0.56	ug/L			07/20/19 16:58	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 16:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 16:58	1
Xylenes, Total	**190**		10	1.6	ug/L			07/20/19 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/20/19 16:58*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*07/20/19 16:58*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/20/19 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	**1.7**	**J**	1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10
Acenaphthene	**2.4**	**H** J	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
Acenaphthylene	ND		1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10
Acenaphthylene	ND	H UJ	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
Anthracene	ND		1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10
Anthracene	**0.50**	**J H** J	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
Benzo[a]anthracene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Benzo[a]anthracene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Benzo[a]pyrene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Benzo[a]pyrene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Benzo[b]fluoranthene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Benzo[b]fluoranthene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Benzo[g,h,i]perylene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Benzo[g,h,i]perylene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Benzo[k]fluoranthene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Benzo[k]fluoranthene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Chrysene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Chrysene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Dibenz(a,h)anthracene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Dibenz(a,h)anthracene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Fluoranthene	ND		1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10

Client Sample ID: ROST4PZC-ROX-071219
Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H UJ	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
Fluorene	**1.4**	**J**	1.9	0.20	ug/L		07/17/19 14:25	07/31/19 14:26	10
Fluorene	**1.6**	**H J**	0.97	0.10	ug/L		07/24/19 22:20	08/02/19 22:10	5
Indeno[1,2,3-cd]pyrene	ND	H UJ	0.97	0.19	ug/L		07/24/19 22:20	08/02/19 22:10	5
Indeno[1,2,3-cd]pyrene	ND		1.9	0.39	ug/L		07/17/19 14:25	08/05/19 14:18	10
Phenanthrene	**3.8**		1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10
Phenanthrene	**4.1**	**H J**	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
Pyrene	ND	H UJ	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
Pyrene	ND		1.9	0.19	ug/L		07/17/19 14:25	08/05/19 14:18	10
1-Methylnaphthalene	**66**		1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10
1-Methylnaphthalene	**72**	**H J**	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5
2-Methylnaphthalene	**59**		1.9	0.19	ug/L		07/17/19 14:25	07/31/19 14:26	10
2-Methylnaphthalene	**66**	**H J**	0.97	0.097	ug/L		07/24/19 22:20	08/02/19 22:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*33 - 138*	*07/24/19 22:20*	*08/02/19 22:10*	*5*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*08/05/19 14:18*	*10*
2-Fluorobiphenyl	*80*		*15 - 122*	*07/24/19 22:20*	*08/02/19 22:10*	*5*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*08/05/19 14:18*	*10*
Nitrobenzene-d5	*61*		*19 - 130*	*07/24/19 22:20*	*08/02/19 22:10*	*5*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*08/05/19 14:18*	*10*

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		07/17/19 14:25	07/20/19 22:03	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/17/19 14:25	07/20/19 22:03	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 14:25	07/20/19 22:03	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 22:03	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/17/19 14:25	07/20/19 22:03	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/17/19 14:25	07/20/19 22:03	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/17/19 14:25	07/20/19 22:03	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/17/19 14:25	07/20/19 22:03	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 14:25	07/20/19 22:03	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/17/19 14:25	07/20/19 22:03	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 14:25	07/20/19 22:03	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/17/19 14:25	07/20/19 22:03	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 22:03	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 22:03	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 22:03	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 22:03	1
Dibenzofuran	**1.6**	**J**	9.6	0.50	ug/L		07/17/19 14:25	07/20/19 22:03	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 14:25	07/20/19 22:03	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 22:03	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/17/19 14:25	07/20/19 22:03	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 22:03	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/17/19 14:25	07/20/19 22:03	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 14:25	07/20/19 22:03	1
4,6-Dinitro-ortho-cresol	**3.6**	**J**	9.6	1.9	ug/L		07/17/19 14:25	07/20/19 22:03	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/20/19 22:03	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 22:03	1

Client Sample ID: ROST4PZC-ROX-071219
Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 22:03	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/17/19 14:25	07/20/19 22:03	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 22:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 22:03	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 14:25	07/20/19 22:03	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/20/19 22:03	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 14:25	07/20/19 22:03	1
Indene	**1.2**	**J**	9.6	0.96	ug/L		07/17/19 14:25	07/20/19 22:03	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 14:25	07/20/19 22:03	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 22:03	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 14:25	07/20/19 22:03	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 22:03	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 22:03	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 14:25	07/20/19 22:03	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 14:25	07/20/19 22:03	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/17/19 14:25	07/20/19 22:03	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 14:25	07/20/19 22:03	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 22:03	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/17/19 14:25	07/20/19 22:03	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 14:25	07/20/19 22:03	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 14:25	07/20/19 22:03	1
Phenol	ND		9.6	2.5	ug/L		07/17/19 14:25	07/20/19 22:03	1
Pyridine	ND		9.6	3.1	ug/L		07/17/19 14:25	07/20/19 22:03	1
Quinoline	ND		9.6	5.8	ug/L		07/17/19 14:25	07/20/19 22:03	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/17/19 14:25	07/20/19 22:03	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 22:03*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 22:03*	*1*
Nitrobenzene-d5	*0*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 22:03*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 22:03*	*1*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/20/19 22:03*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 22:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.7	3.7	ug/L		07/24/19 22:20	07/31/19 02:37	1
Benzenethiol	ND	H *	9.7	1.6	ug/L		07/24/19 22:20	07/31/19 02:37	1
Benzoic acid	ND	H	29	7.1	ug/L		07/24/19 22:20	07/31/19 02:37	1
Benzyl alcohol	ND	H	9.7	1.9	ug/L		07/24/19 22:20	07/31/19 02:37	1
Bis(2-chloroethoxy)methane	ND	H	9.7	0.67	ug/L		07/24/19 22:20	07/31/19 02:37	1
Bis(2-chloroethyl)ether	ND	H	9.7	0.72	ug/L		07/24/19 22:20	08/01/19 22:01	1
bis (2-chloroisopropyl) ether	ND	H	9.7	0.78	ug/L		07/24/19 22:20	08/01/19 22:01	1
Bis(2-ethylhexyl) phthalate	ND	H	9.7	4.8	ug/L		07/24/19 22:20	07/31/19 02:37	1
4-Bromophenyl phenyl ether	ND	H	9.7	0.31	ug/L		07/24/19 22:20	08/01/19 22:01	1
Butyl benzyl phthalate	ND	H	9.7	0.67	ug/L		07/24/19 22:20	07/31/19 02:37	1
4-Chloroaniline	ND	H	9.7	3.3	ug/L		07/24/19 22:20	07/31/19 02:37	1
4-Chloro-3-methylphenol	ND	H	9.7	3.7	ug/L		07/24/19 22:20	07/31/19 02:37	1

Client Sample ID: ROST4PZC-ROX-071219
Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND	H	9.7	0.50	ug/L		07/24/19 22:20	08/01/19 22:01	1
2-Chlorophenol	ND	H	9.7	2.1	ug/L		07/24/19 22:20	07/31/19 02:37	1
4-Chlorophenyl phenyl ether	ND	H	9.7	1.9	ug/L		07/24/19 22:20	08/01/19 22:01	1
Dibenz[a,h]acridine	ND	H	9.7	2.9	ug/L		07/24/19 22:20	08/01/19 22:01	1
Dibenzofuran	0.94	J H	9.7	0.50	ug/L		07/24/19 22:20	08/01/19 22:01	1
3,3'-Dichlorobenzidine	ND	H	9.7	2.5	ug/L		07/24/19 22:20	07/31/19 02:37	1
2,4-Dichlorophenol	ND	H	9.7	2.9	ug/L		07/24/19 22:20	07/31/19 02:37	1
Diethyl phthalate	ND	H	9.7	0.68	ug/L		07/24/19 22:20	07/31/19 02:37	1
2,4-Dimethylphenol	ND	H	9.7	3.4	ug/L		07/24/19 22:20	07/31/19 02:37	1
Dimethyl phthalate	ND	H	9.7	0.58	ug/L		07/24/19 22:20	08/01/19 22:01	1
Di-n-butyl phthalate	ND	H	9.7	2.6	ug/L		07/24/19 22:20	07/31/19 02:37	1
4,6-Dinitro-ortho-cresol	ND	H	9.7	1.9	ug/L		07/24/19 22:20	07/31/19 02:37	1
2,4-Dinitrophenol	ND	H	29	3.3	ug/L		07/24/19 22:20	07/31/19 02:37	1
2,4-Dinitrotoluene	ND	H	9.7	1.8	ug/L		07/24/19 22:20	08/01/19 22:01	1
2,6-Dinitrotoluene	ND	H	9.7	1.8	ug/L		07/24/19 22:20	08/01/19 22:01	1
Di-n-octyl phthalate	ND	H	9.7	0.43	ug/L		07/24/19 22:20	07/31/19 02:37	1
1,4-Dioxane	ND	H	9.7	0.97	ug/L		07/24/19 22:20	07/31/19 02:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.7	0.97	ug/L		07/24/19 22:20	07/31/19 02:37	1
Hexachlorobenzene	ND	H	9.7	0.24	ug/L		07/24/19 22:20	08/01/19 22:01	1
Hexachlorocyclopentadiene	ND	H	19	2.5	ug/L		07/24/19 22:20	08/01/19 22:01	1
Hexachloroethane	ND	H	9.7	4.1	ug/L		07/24/19 22:20	07/31/19 02:37	1
Indene	1.5	J H	9.7	0.97	ug/L		07/24/19 22:20	07/31/19 02:37	1
Isophorone	ND	H	9.7	0.55	ug/L		07/24/19 22:20	07/31/19 02:37	1
2-Methylphenol	ND	H	9.7	1.7	ug/L		07/24/19 22:20	07/31/19 02:37	1
3 & 4 Methylphenol	ND	H	19	1.0	ug/L		07/24/19 22:20	07/31/19 02:37	1
2-Nitroaniline	ND	H	9.7	2.1	ug/L		07/24/19 22:20	07/31/19 02:37	1
3-Nitroaniline	ND	H	9.7	1.7	ug/L		07/24/19 22:20	07/31/19 02:37	1
4-Nitroaniline	ND	H	9.7	2.4	ug/L		07/24/19 22:20	07/31/19 02:37	1
Nitrobenzene	ND	H	9.7	0.53	ug/L		07/24/19 22:20	07/31/19 02:37	1
2-Nitrophenol	ND	H	9.7	0.63	ug/L		07/24/19 22:20	07/31/19 02:37	1
4-Nitrophenol	ND	H	9.7	2.0	ug/L		07/24/19 22:20	07/31/19 02:37	1
N-Nitrosodimethylamine	ND	H	9.7	3.4	ug/L		07/24/19 22:20	07/31/19 02:37	1
N-Nitrosodi-n-propylamine	ND	H	9.7	3.2	ug/L		07/24/19 22:20	07/31/19 02:37	1
N-Nitrosodiphenylamine	ND	H	9.7	0.46	ug/L		07/24/19 22:20	07/31/19 02:37	1
Pentachlorophenol	ND	H	19	1.8	ug/L		07/24/19 22:20	07/31/19 02:37	1
Phenol	ND	H	9.7	2.5	ug/L		07/24/19 22:20	07/31/19 02:37	1
Pyridine	ND	H	9.7	3.1	ug/L		07/24/19 22:20	07/31/19 02:37	1
Quinoline	ND	H	9.7	5.8	ug/L		07/24/19 22:20	08/01/19 22:01	1
2,4,5-Trichlorophenol	ND	H	9.7	3.6	ug/L		07/24/19 22:20	08/01/19 22:01	1
2,4,6-Trichlorophenol	ND	H	9.7	3.4	ug/L		07/24/19 22:20	08/01/19 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*34 - 120*	*07/24/19 22:20*	*07/31/19 02:37*	*1*
2-Fluorophenol	*81*		*10 - 120*	*07/24/19 22:20*	*07/31/19 02:37*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*07/24/19 22:20*	*07/31/19 02:37*	*1*
Phenol-d5	*71*		*10 - 120*	*07/24/19 22:20*	*07/31/19 02:37*	*1*
Terphenyl-d14	*45*	*X*	*53 - 125*	*07/24/19 22:20*	*07/31/19 02:37*	*1*
2,4,6-Tribromophenol	*46*		*15 - 135*	*07/24/19 22:20*	*07/31/19 02:37*	*1*

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

Job ID: 400-173131-1

Client Sample ID: ROST4PZC-ROX-071219
Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		07/22/19 13:44	07/23/19 05:03	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 13:44	07/23/19 05:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/22/19 13:44*	*07/23/19 05:03*	*1*

Client Sample ID: TB-ROX-071219-8260-B
Date Collected: 07/12/19 00:00
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-8
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			07/20/19 14:20	1
Acrolein	ND		20	10	ug/L			07/20/19 14:20	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 14:20	1
Benzene	ND		1.0	0.38	ug/L			07/20/19 14:20	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 14:20	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 14:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 14:20	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 14:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 14:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 14:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 14:20	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 14:20	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 14:20	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 14:20	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 14:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 14:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 14:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 14:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 14:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 14:20	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 14:20	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 14:20	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 14:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 14:20	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 14:20	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 14:20	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 14:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 14:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 14:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 14:20	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 14:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 14:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 14:20	1

Client Sample ID: TB-ROX-071219-8260-B
Date Collected: 07/12/19 00:00
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-8
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			07/20/19 14:20	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 14:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 14:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 14:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 14:20	1
Toluene	ND		1.0	0.41	ug/L			07/20/19 14:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 14:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 14:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 14:20	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 14:20	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 14:20	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 14:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 14:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 14:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 14:20	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 14:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 14:20	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*78 - 118*		*07/20/19 14:20*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/20/19 14:20*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/20/19 14:20*	*1*

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

Job ID: 400-173131-1

Client Sample ID: TB-ROX-071219-8011-B
Date Collected: 07/12/19 00:00
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-9
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		07/22/19 13:44	07/23/19 05:25	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 13:44	07/23/19 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*07/22/19 13:44*	*07/23/19 05:25*	*1*

Client Sample ID: P74-ROX-071219-EB
Date Collected: 07/12/19 08:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-10
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			07/21/19 14:20	1
Acrolein	ND		20	10	ug/L			07/21/19 14:20	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/19 14:20	1
Benzene	ND		1.0	0.38	ug/L			07/21/19 14:20	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/19 14:20	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/21/19 14:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Bromoform	ND		5.0	0.71	ug/L			07/21/19 14:20	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/19 14:20	1
2-Butanone (MEK)	**3.6**	**J**	25	2.6	ug/L			07/21/19 14:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/19 14:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/21/19 14:20	1
Chloroform	ND		1.0	0.60	ug/L			07/21/19 14:20	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/21/19 14:20	1
Chloromethane	ND		1.0	0.83	ug/L			07/21/19 14:20	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/19 14:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/19 14:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/19 14:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/19 14:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/21/19 14:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/19 14:20	1
2-Hexanone	ND		25	3.1	ug/L			07/21/19 14:20	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/21/19 14:20	1
Methylene bromide	ND		5.0	0.59	ug/L			07/21/19 14:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/19 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/21/19 14:20	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/21/19 14:20	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/21/19 14:20	1
Naphthalene	ND		1.0	1.0	ug/L			07/21/19 14:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/21/19 14:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/21/19 14:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/19 14:20	1
o-Xylene	ND		5.0	0.60	ug/L			07/21/19 14:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/19 14:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/21/19 14:20	1

Client Sample ID: P74-ROX-071219-EB
Date Collected: 07/12/19 08:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/21/19 14:20	1
Styrene	ND		1.0	1.0	ug/L			07/21/19 14:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/19 14:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/21/19 14:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/21/19 14:20	1
Toluene	ND		1.0	0.41	ug/L			07/21/19 14:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/19 14:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/21/19 14:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/19 14:20	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/21/19 14:20	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/21/19 14:20	1
Trichloroethene	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/21/19 14:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/19 14:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/21/19 14:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/21/19 14:20	1
Vinyl acetate	ND		25	2.0	ug/L			07/21/19 14:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/19 14:20	1
Xylenes, Total	ND		10	1.6	ug/L			07/21/19 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/21/19 14:20*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/21/19 14:20*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/21/19 14:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
Acenaphthene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/02/19 22:26	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
Acenaphthylene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/02/19 22:26	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
Anthracene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 17:09	1
Benzo[a]anthracene	ND	*	0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Benzo[a]anthracene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Benzo[a]pyrene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Benzo[b]fluoranthene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Benzo[g,h,i]perylene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Benzo[k]fluoranthene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Chrysene	ND	*	0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Chrysene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Dibenz(a,h)anthracene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1

Client Sample ID: P74-ROX-071219-EB
Date Collected: 07/12/19 08:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 17:09	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 14:25	07/31/19 14:43	1
Fluorene	ND	H	0.20	0.021	ug/L		07/24/19 22:20	08/02/19 22:26	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 14:43	1
Indeno[1,2,3-cd]pyrene	ND	H	0.20	0.040	ug/L		07/24/19 22:20	08/02/19 22:26	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
Phenanthrene	**0.027**	**J H**	0.20	0.020	ug/L		07/24/19 22:20	08/01/19 17:09	1
Pyrene	ND	*	0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
Pyrene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/02/19 22:26	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
1-Methylnaphthalene	**0.026**	**J H**	0.20	0.020	ug/L		07/24/19 22:20	08/02/19 22:26	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 14:43	1
2-Methylnaphthalene	ND	H	0.20	0.020	ug/L		07/24/19 22:20	08/02/19 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X **	*33 - 138*	*07/17/19 14:25*	*07/31/19 14:43*	*1*
Terphenyl-d14	*120*		*33 - 138*	*07/24/19 22:20*	*08/02/19 22:26*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 14:43*	*1*
2-Fluorobiphenyl	*93*		*15 - 122*	*07/24/19 22:20*	*08/02/19 22:26*	*1*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*07/31/19 14:43*	*1*
Nitrobenzene-d5	*86*		*19 - 130*	*07/24/19 22:20*	*08/02/19 22:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		07/17/19 14:25	07/20/19 22:24	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/17/19 14:25	07/20/19 22:24	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 14:25	07/20/19 22:24	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 22:24	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/17/19 14:25	07/20/19 22:24	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/17/19 14:25	07/20/19 22:24	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/17/19 14:25	07/20/19 22:24	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		07/17/19 14:25	07/20/19 22:24	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 14:25	07/20/19 22:24	1
Butyl benzyl phthalate	ND	*	9.6	0.66	ug/L		07/17/19 14:25	07/20/19 22:24	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 14:25	07/20/19 22:24	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/17/19 14:25	07/20/19 22:24	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 22:24	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 22:24	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 22:24	1
Dibenz[a,h]acridine	ND	*	9.6	2.9	ug/L		07/17/19 14:25	07/20/19 22:24	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 22:24	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 14:25	07/20/19 22:24	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 22:24	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/17/19 14:25	07/20/19 22:24	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 22:24	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/17/19 14:25	07/20/19 22:24	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 14:25	07/20/19 22:24	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 22:24	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/20/19 22:24	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 22:24	1

Client Sample ID: P74-ROX-071219-EB
Date Collected: 07/12/19 08:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 22:24	1
Di-n-octyl phthalate	ND	*	9.6	0.42	ug/L		07/17/19 14:25	07/20/19 22:24	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 22:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 22:24	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 14:25	07/20/19 22:24	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/20/19 22:24	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 14:25	07/20/19 22:24	1
Indene	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 22:24	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 14:25	07/20/19 22:24	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 22:24	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 14:25	07/20/19 22:24	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 22:24	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 22:24	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 14:25	07/20/19 22:24	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 14:25	07/20/19 22:24	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/17/19 14:25	07/20/19 22:24	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 14:25	07/20/19 22:24	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 22:24	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/17/19 14:25	07/20/19 22:24	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 14:25	07/20/19 22:24	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 14:25	07/20/19 22:24	1
Phenol	ND		9.6	2.5	ug/L		07/17/19 14:25	07/20/19 22:24	1
Pyridine	ND		9.6	3.1	ug/L		07/17/19 14:25	07/20/19 22:24	1
Quinoline	ND		9.6	5.8	ug/L		07/17/19 14:25	07/20/19 22:24	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/17/19 14:25	07/20/19 22:24	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 22:24*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 22:24*	*1*
Nitrobenzene-d5	*0*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 22:24*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 22:24*	*1*
Terphenyl-d14	*0*	*X* *	*53 - 125*	*07/17/19 14:25*	*07/20/19 22:24*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 22:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.8	ug/L		07/24/19 22:20	07/31/19 02:58	1
Benzenethiol	ND	H *	9.9	1.7	ug/L		07/24/19 22:20	07/31/19 02:58	1
Benzoic acid	ND	H	30	7.2	ug/L		07/24/19 22:20	07/31/19 02:58	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		07/24/19 22:20	07/31/19 02:58	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.68	ug/L		07/24/19 22:20	07/31/19 02:58	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.73	ug/L		07/24/19 22:20	08/01/19 22:22	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		07/24/19 22:20	08/01/19 22:22	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	4.9	ug/L		07/24/19 22:20	07/31/19 02:58	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		07/24/19 22:20	08/01/19 22:22	1
Butyl benzyl phthalate	ND	H	9.9	0.68	ug/L		07/24/19 22:20	07/31/19 02:58	1
4-Chloroaniline	ND	H	9.9	3.4	ug/L		07/24/19 22:20	07/31/19 02:58	1
4-Chloro-3-methylphenol	ND	H	9.9	3.8	ug/L		07/24/19 22:20	07/31/19 02:58	1

Client Sample ID: P74-ROX-071219-EB
Date Collected: 07/12/19 08:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND	H	9.9	0.51	ug/L		07/24/19 22:20	08/01/19 22:22	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		07/24/19 22:20	07/31/19 02:58	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		07/24/19 22:20	08/01/19 22:22	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		07/24/19 22:20	08/01/19 22:22	1
Dibenzofuran	ND	H	9.9	0.51	ug/L		07/24/19 22:20	08/01/19 22:22	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		07/24/19 22:20	07/31/19 02:58	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		07/24/19 22:20	07/31/19 02:58	1
Diethyl phthalate	ND	H	9.9	0.69	ug/L		07/24/19 22:20	07/31/19 02:58	1
2,4-Dimethylphenol	ND	H	9.9	3.5	ug/L		07/24/19 22:20	07/31/19 02:58	1
Dimethyl phthalate	ND	H	9.9	0.59	ug/L		07/24/19 22:20	08/01/19 22:22	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		07/24/19 22:20	07/31/19 02:58	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		07/24/19 22:20	07/31/19 02:58	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		07/24/19 22:20	07/31/19 02:58	1
2,4-Dinitrotoluene	ND	H	9.9	1.9	ug/L		07/24/19 22:20	08/01/19 22:22	1
2,6-Dinitrotoluene	ND	H	9.9	1.9	ug/L		07/24/19 22:20	08/01/19 22:22	1
Di-n-octyl phthalate	ND	H	9.9	0.43	ug/L		07/24/19 22:20	07/31/19 02:58	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		07/24/19 22:20	07/31/19 02:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		07/24/19 22:20	07/31/19 02:58	1
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		07/24/19 22:20	08/01/19 22:22	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		07/24/19 22:20	08/01/19 22:22	1
Hexachloroethane	ND	H	9.9	4.1	ug/L		07/24/19 22:20	07/31/19 02:58	1
Indene	ND	H	9.9	0.99	ug/L		07/24/19 22:20	07/31/19 02:58	1
Isophorone	ND	H	9.9	0.56	ug/L		07/24/19 22:20	07/31/19 02:58	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		07/24/19 22:20	07/31/19 02:58	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/24/19 22:20	07/31/19 02:58	1
2-Nitroaniline	ND	H	9.9	2.2	ug/L		07/24/19 22:20	07/31/19 02:58	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		07/24/19 22:20	07/31/19 02:58	1
4-Nitroaniline	ND	H	9.9	2.4	ug/L		07/24/19 22:20	07/31/19 02:58	1
Nitrobenzene	ND	H	9.9	0.54	ug/L		07/24/19 22:20	07/31/19 02:58	1
2-Nitrophenol	ND	H	9.9	0.64	ug/L		07/24/19 22:20	07/31/19 02:58	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		07/24/19 22:20	07/31/19 02:58	1
N-Nitrosodimethylamine	ND	H	9.9	3.5	ug/L		07/24/19 22:20	07/31/19 02:58	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		07/24/19 22:20	07/31/19 02:58	1
N-Nitrosodiphenylamine	ND	H	9.9	0.46	ug/L		07/24/19 22:20	07/31/19 02:58	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/24/19 22:20	07/31/19 02:58	1
Phenol	ND	H	9.9	2.6	ug/L		07/24/19 22:20	07/31/19 02:58	1
Pyridine	ND	H	9.9	3.2	ug/L		07/24/19 22:20	07/31/19 02:58	1
Quinoline	ND	H	9.9	5.9	ug/L		07/24/19 22:20	08/01/19 22:22	1
2,4,5-Trichlorophenol	ND	H	9.9	3.7	ug/L		07/24/19 22:20	08/01/19 22:22	1
2,4,6-Trichlorophenol	ND	H	9.9	3.5	ug/L		07/24/19 22:20	08/01/19 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*34 - 120*	*07/24/19 22:20*	*07/31/19 02:58*	*1*
2-Fluorophenol	*54*		*10 - 120*	*07/24/19 22:20*	*07/31/19 02:58*	*1*
Nitrobenzene-d5	*86*		*27 - 120*	*07/24/19 22:20*	*07/31/19 02:58*	*1*
Phenol-d5	*74*		*10 - 120*	*07/24/19 22:20*	*07/31/19 02:58*	*1*
Terphenyl-d14	*70*		*53 - 125*	*07/24/19 22:20*	*07/31/19 02:58*	*1*
2,4,6-Tribromophenol	*37*		*15 - 135*	*07/24/19 22:20*	*07/31/19 02:58*	*1*

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

Job ID: 400-173131-1

Client Sample ID: P74-ROX-071219-EB
Date Collected: 07/12/19 08:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-10
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	0.0055	ug/L		07/22/19 15:26	07/23/19 06:55	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 15:26	07/23/19 06:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*07/22/19 15:26*	*07/23/19 06:55*	*1*

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

Job ID: 400-173131-1

Client Sample ID: P74-ROX-071219-
Date Collected: 07/12/19 09:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-11
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			07/20/19 11:15	1
Acrolein	ND		20	10	ug/L			07/20/19 11:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 11:15	1
Benzene	**4.5**		1.0	0.38	ug/L			07/20/19 11:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 11:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 11:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 11:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 11:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 11:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 11:15	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/20/19 11:15	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 11:15	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 11:15	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 11:15	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 11:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 11:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 11:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 11:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 11:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 11:15	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 11:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 11:15	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 11:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 11:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 11:15	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 11:15	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 11:15	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 11:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 11:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 11:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 11:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 11:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 11:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 11:15	1

Client Sample ID: P74-ROX-071219-
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Lab Sample ID: 400-173131-11
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			07/20/19 11:15	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 11:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 11:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 11:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 11:15	1
Toluene	**1.1**		1.0	0.41	ug/L			07/20/19 11:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 11:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 11:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 11:15	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 11:15	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 11:15	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 11:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 11:15	1
1,2,4-Trimethylbenzene	**2.0**		1.0	0.82	ug/L			07/20/19 11:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 11:15	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 11:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 11:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 11:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/20/19 11:15*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*07/20/19 11:15*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/20/19 11:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
Acenaphthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
Acenaphthylene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
Anthracene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Benzo[a]anthracene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Benzo[a]pyrene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Benzo[b]fluoranthene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Benzo[g,h,i]perylene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Benzo[k]fluoranthene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Chrysene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Chrysene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Dibenz(a,h)anthracene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1

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Lab Sample ID: 400-173131-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**0.022**	**J H** J	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 14:25	07/31/19 15:00	1
Fluorene	ND	H UJ	0.20	0.021	ug/L		07/25/19 08:28	08/02/19 19:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/17/19 14:25	07/31/19 15:00	1
Indeno[1,2,3-cd]pyrene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:12	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
Phenanthrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
Pyrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
1-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:00	1
2-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*07/31/19 15:00*	*1*
Terphenyl-d14	*90*		*33 - 138*	*07/25/19 08:28*	*08/02/19 19:12*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 15:00*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*07/25/19 08:28*	*08/02/19 19:12*	*1*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*07/31/19 15:00*	*1*
Nitrobenzene-d5	*87*		*19 - 130*	*07/25/19 08:28*	*08/02/19 19:12*	*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		07/17/19 14:25	07/20/19 21:17	1
Benzenethiol	ND		9.6	1.6	ug/L		07/17/19 14:25	07/20/19 21:17	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 14:25	07/20/19 21:17	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 21:17	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/17/19 14:25	07/20/19 21:17	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/17/19 14:25	07/20/19 21:17	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/17/19 14:25	07/20/19 21:17	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/17/19 14:25	07/20/19 21:17	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 14:25	07/20/19 21:17	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		07/17/19 14:25	07/20/19 21:17	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 14:25	07/20/19 21:17	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/17/19 14:25	07/20/19 21:17	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 21:17	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 21:17	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 21:17	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 21:17	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 21:17	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 14:25	07/20/19 21:17	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 21:17	1
Diethyl phthalate	**1.0**	**J**	9.6	0.67	ug/L		07/17/19 14:25	07/20/19 21:17	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 21:17	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/17/19 14:25	07/20/19 21:17	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 14:25	07/20/19 21:17	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 21:17	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/20/19 21:17	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 21:17	1

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Lab Sample ID: 400-173131-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 21:17	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/17/19 14:25	07/20/19 21:17	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 21:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 21:17	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 14:25	07/20/19 21:17	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/20/19 21:17	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 14:25	07/20/19 21:17	1
Indene	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 21:17	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 14:25	07/20/19 21:17	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 21:17	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 14:25	07/20/19 21:17	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 21:17	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 21:17	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 14:25	07/20/19 21:17	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 14:25	07/20/19 21:17	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/17/19 14:25	07/20/19 21:17	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 14:25	07/20/19 21:17	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 21:17	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/17/19 14:25	07/20/19 21:17	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 14:25	07/20/19 21:17	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 14:25	07/20/19 21:17	1
Phenol	ND		9.6	2.5	ug/L		07/17/19 14:25	07/20/19 21:17	1
Pyridine	ND		9.6	3.1	ug/L		07/17/19 14:25	07/20/19 21:17	1
Quinoline	ND		9.6	5.8	ug/L		07/17/19 14:25	07/20/19 21:17	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/17/19 14:25	07/20/19 21:17	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 21:17*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:17*	*1*
Nitrobenzene-d5	*0.3*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 21:17*	*1*
Phenol-d5	*0.09*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:17*	*1*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/20/19 21:17*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 21:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.8	ug/L		07/25/19 08:28	07/31/19 22:09	1
Benzenethiol	ND	H	9.9	1.7	ug/L		07/25/19 08:28	07/31/19 22:09	1
Benzoic acid	ND	H *	30	7.2	ug/L		07/25/19 08:28	07/31/19 22:09	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.68	ug/L		07/25/19 08:28	07/31/19 22:09	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.73	ug/L		07/25/19 08:28	07/31/19 22:09	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		07/25/19 08:28	07/31/19 22:09	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	5.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		07/25/19 08:28	07/31/19 22:09	1
Butyl benzyl phthalate	ND	H	9.9	0.68	ug/L		07/25/19 08:28	07/31/19 22:09	1
4-Chloroaniline	ND	H	9.9	3.4	ug/L		07/25/19 08:28	07/31/19 22:09	1
4-Chloro-3-methylphenol	ND	H	9.9	3.8	ug/L		07/25/19 08:28	07/31/19 22:09	1

Client Sample ID: P74-ROX-071219-
Date Collected: 07/12/19 09:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND	H	9.9	0.52	ug/L		07/25/19 08:28	07/31/19 22:09	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		07/25/19 08:28	07/31/19 22:09	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
Dibenzofuran	ND	H	9.9	0.52	ug/L		07/25/19 08:28	07/31/19 22:09	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
Diethyl phthalate	ND	H	9.9	0.69	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,4-Dimethylphenol	ND	H	9.9	3.5	ug/L		07/25/19 08:28	07/31/19 22:09	1
Dimethyl phthalate	ND	H	9.9	0.59	ug/L		07/25/19 08:28	07/31/19 22:09	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		07/25/19 08:28	07/31/19 22:09	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,4-Dinitrotoluene	ND	H *	9.9	1.9	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,6-Dinitrotoluene	ND	H *	9.9	1.9	ug/L		07/25/19 08:28	07/31/19 22:09	1
Di-n-octyl phthalate	ND	H	9.9	0.44	ug/L		07/25/19 08:28	07/31/19 22:09	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		07/25/19 08:28	07/31/19 22:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		07/25/19 08:28	07/31/19 22:09	1
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		07/25/19 08:28	07/31/19 22:09	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		07/25/19 08:28	07/31/19 22:09	1
Hexachloroethane	ND	H	9.9	4.2	ug/L		07/25/19 08:28	07/31/19 22:09	1
Indene	ND	H	9.9	0.99	ug/L		07/25/19 08:28	07/31/19 22:09	1
Isophorone	ND	H	9.9	0.56	ug/L		07/25/19 08:28	07/31/19 22:09	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		07/25/19 08:28	07/31/19 22:09	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/25/19 08:28	07/31/19 22:09	1
2-Nitroaniline	ND	H	9.9	2.2	ug/L		07/25/19 08:28	07/31/19 22:09	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		07/25/19 08:28	07/31/19 22:09	1
4-Nitroaniline	ND	H	9.9	2.5	ug/L		07/25/19 08:28	07/31/19 22:09	1
Nitrobenzene	ND	H	9.9	0.54	ug/L		07/25/19 08:28	07/31/19 22:09	1
2-Nitrophenol	ND	H	9.9	0.64	ug/L		07/25/19 08:28	07/31/19 22:09	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		07/25/19 08:28	07/31/19 22:09	1
N-Nitrosodimethylamine	ND	H	9.9	3.5	ug/L		07/25/19 08:28	07/31/19 22:09	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		07/25/19 08:28	07/31/19 22:09	1
N-Nitrosodiphenylamine	ND	H	9.9	0.47	ug/L		07/25/19 08:28	07/31/19 22:09	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/25/19 08:28	07/31/19 22:09	1
Phenol	ND	H	9.9	2.6	ug/L		07/25/19 08:28	07/31/19 22:09	1
Pyridine	ND	H	9.9	3.2	ug/L		07/25/19 08:28	07/31/19 22:09	1
Quinoline	ND	H	9.9	5.9	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,4,5-Trichlorophenol	ND	H	9.9	3.7	ug/L		07/25/19 08:28	07/31/19 22:09	1
2,4,6-Trichlorophenol	ND	H	9.9	3.5	ug/L		07/25/19 08:28	07/31/19 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*		*34 - 120*	*07/25/19 08:28*	*07/31/19 22:09*	*1*
2-Fluorophenol	*24*		*10 - 120*	*07/25/19 08:28*	*07/31/19 22:09*	*1*
Nitrobenzene-d5	*88*		*27 - 120*	*07/25/19 08:28*	*07/31/19 22:09*	*1*
Phenol-d5	*48*		*10 - 120*	*07/25/19 08:28*	*07/31/19 22:09*	*1*
Terphenyl-d14	*62*		*53 - 125*	*07/25/19 08:28*	*07/31/19 22:09*	*1*
2,4,6-Tribromophenol	*53*		*15 - 135*	*07/25/19 08:28*	*07/31/19 22:09*	*1*

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

Job ID: 400-173131-1

Client Sample ID: P74-ROX-071219-
Date Collected: 07/12/19 09:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-11
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		07/22/19 15:26	07/23/19 07:17	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/22/19 15:26	07/23/19 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/22/19 15:26*	*07/23/19 07:17*	*1*

Client Sample ID: P93C-ROX-071219
Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
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			07/20/19 11:41	1
Acrolein	ND		20	10	ug/L			07/20/19 11:41	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 11:41	1
Benzene	ND		1.0	0.38	ug/L			07/20/19 11:41	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 11:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 11:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 11:41	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 11:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 11:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 11:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 11:41	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 11:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 11:41	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 11:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 11:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 11:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 11:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 11:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 11:41	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 11:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 11:41	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 11:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 11:41	1
Methyl tert-butyl ether	**2.2**		1.0	0.74	ug/L			07/20/19 11:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 11:41	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 11:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 11:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 11:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 11:41	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 11:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 11:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 11:41	1

Client Sample ID: P93C-ROX-071219
Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
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			07/20/19 11:41	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 11:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 11:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 11:41	1
Toluene	ND		1.0	0.41	ug/L			07/20/19 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 11:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 11:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 11:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 11:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 11:41	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 11:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 11:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 11:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 11:41	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 11:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 11:41	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*117*		*78 - 118*		*07/20/19 11:41*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*07/20/19 11:41*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*07/20/19 11:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
Acenaphthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
Acenaphthylene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
Anthracene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Benzo[a]anthracene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Benzo[a]pyrene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Benzo[b]fluoranthene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Benzo[g,h,i]perylene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Benzo[k]fluoranthene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Chrysene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Chrysene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Dibenz(a,h)anthracene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1

Client Sample ID: P93C-ROX-071219
Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 14:25	07/31/19 15:19	1
Fluorene	ND	H UJ	0.20	0.021	ug/L		07/25/19 08:28	08/02/19 19:28	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:19	1
Indeno[1,2,3-cd]pyrene	ND	H UJ	0.20	0.040	ug/L		07/25/19 08:28	08/02/19 19:28	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
Phenanthrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
Pyrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
1-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1
2-Methylnaphthalene	**0.054**	**J**	0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:19	1
2-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*07/31/19 15:19*	*1*
Terphenyl-d14	*81*		*33 - 138*	*07/25/19 08:28*	*08/02/19 19:28*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 15:19*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*07/25/19 08:28*	*08/02/19 19:28*	*1*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*07/31/19 15:19*	*1*
Nitrobenzene-d5	*84*		*19 - 130*	*07/25/19 08:28*	*08/02/19 19:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		07/17/19 14:25	07/20/19 21:38	1
Benzenethiol	ND		9.6	1.6	ug/L		07/17/19 14:25	07/20/19 21:38	1
Benzoic acid	ND		29	7.0	ug/L		07/17/19 14:25	07/20/19 21:38	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 21:38	1
Bis(2-chloroethoxy)methane	ND		9.6	0.67	ug/L		07/17/19 14:25	07/20/19 21:38	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/17/19 14:25	07/20/19 21:38	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/17/19 14:25	07/20/19 21:38	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/17/19 14:25	07/20/19 21:38	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/17/19 14:25	07/20/19 21:38	1
Butyl benzyl phthalate	ND		9.6	0.67	ug/L		07/17/19 14:25	07/20/19 21:38	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/17/19 14:25	07/20/19 21:38	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/17/19 14:25	07/20/19 21:38	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 21:38	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 21:38	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 21:38	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 21:38	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/17/19 14:25	07/20/19 21:38	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/17/19 14:25	07/20/19 21:38	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/17/19 14:25	07/20/19 21:38	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/17/19 14:25	07/20/19 21:38	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 21:38	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/17/19 14:25	07/20/19 21:38	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/17/19 14:25	07/20/19 21:38	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/17/19 14:25	07/20/19 21:38	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/20/19 21:38	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 21:38	1

Client Sample ID: P93C-ROX-071219
Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/17/19 14:25	07/20/19 21:38	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/17/19 14:25	07/20/19 21:38	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 21:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 21:38	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/17/19 14:25	07/20/19 21:38	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/20/19 21:38	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/17/19 14:25	07/20/19 21:38	1
Indene	ND		9.6	0.96	ug/L		07/17/19 14:25	07/20/19 21:38	1
Isophorone	ND		9.6	0.55	ug/L		07/17/19 14:25	07/20/19 21:38	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 21:38	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 14:25	07/20/19 21:38	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/17/19 14:25	07/20/19 21:38	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/17/19 14:25	07/20/19 21:38	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/17/19 14:25	07/20/19 21:38	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/17/19 14:25	07/20/19 21:38	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/17/19 14:25	07/20/19 21:38	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/17/19 14:25	07/20/19 21:38	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 21:38	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/17/19 14:25	07/20/19 21:38	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/17/19 14:25	07/20/19 21:38	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 14:25	07/20/19 21:38	1
Phenol	ND		9.6	2.5	ug/L		07/17/19 14:25	07/20/19 21:38	1
Pyridine	ND		9.6	3.1	ug/L		07/17/19 14:25	07/20/19 21:38	1
Quinoline	ND		9.6	5.8	ug/L		07/17/19 14:25	07/20/19 21:38	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/17/19 14:25	07/20/19 21:38	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/17/19 14:25	07/20/19 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/20/19 21:38*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:38*	*1*
Nitrobenzene-d5	*0.05*	*X*	*27 - 120*	*07/17/19 14:25*	*07/20/19 21:38*	*1*
Phenol-d5	*0.09*	*X*	*10 - 120*	*07/17/19 14:25*	*07/20/19 21:38*	*1*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/20/19 21:38*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/20/19 21:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	10	3.8	ug/L		07/25/19 08:28	07/31/19 22:31	1
Benzenethiol	ND	H	10	1.7	ug/L		07/25/19 08:28	07/31/19 22:31	1
Benzoic acid	ND	H *	30	7.3	ug/L		07/25/19 08:28	07/31/19 22:31	1
Benzyl alcohol	ND	H	10	2.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
Bis(2-chloroethoxy)methane	ND	H	10	0.69	ug/L		07/25/19 08:28	07/31/19 22:31	1
Bis(2-chloroethyl)ether	ND	H	10	0.74	ug/L		07/25/19 08:28	07/31/19 22:31	1
bis (2-chloroisopropyl) ether	ND	H	10	0.81	ug/L		07/25/19 08:28	07/31/19 22:31	1
Bis(2-ethylhexyl) phthalate	ND	H	10	5.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
4-Bromophenyl phenyl ether	ND	H	10	0.32	ug/L		07/25/19 08:28	07/31/19 22:31	1
Butyl benzyl phthalate	ND	H	10	0.69	ug/L		07/25/19 08:28	07/31/19 22:31	1
4-Chloroaniline	ND	H	10	3.4	ug/L		07/25/19 08:28	07/31/19 22:31	1
4-Chloro-3-methylphenol	ND	H	10	3.8	ug/L		07/25/19 08:28	07/31/19 22:31	1

Client Sample ID: P93C-ROX-071219
Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND	H	10	0.52	ug/L		07/25/19 08:28	07/31/19 22:31	1
2-Chlorophenol	ND	H	10	2.2	ug/L		07/25/19 08:28	07/31/19 22:31	1
4-Chlorophenyl phenyl ether	ND	H	10	2.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
Dibenz[a,h]acridine	ND	H	10	3.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
Dibenzofuran	ND	H	10	0.52	ug/L		07/25/19 08:28	07/31/19 22:31	1
3,3'-Dichlorobenzidine	ND	H	10	2.6	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,4-Dichlorophenol	ND	H	10	3.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
Diethyl phthalate	ND	H	10	0.70	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,4-Dimethylphenol	ND	H	10	3.5	ug/L		07/25/19 08:28	07/31/19 22:31	1
Dimethyl phthalate	ND	H	10	0.60	ug/L		07/25/19 08:28	07/31/19 22:31	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		07/25/19 08:28	07/31/19 22:31	1
4,6-Dinitro-ortho-cresol	ND	H	10	2.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,4-Dinitrotoluene	ND	H *	10	1.9	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,6-Dinitrotoluene	ND	H *	10	1.9	ug/L		07/25/19 08:28	07/31/19 22:31	1
Di-n-octyl phthalate	ND	H	10	0.44	ug/L		07/25/19 08:28	07/31/19 22:31	1
1,4-Dioxane	ND	H	10	1.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	10	1.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
Hexachlorobenzene	ND	H	10	0.25	ug/L		07/25/19 08:28	07/31/19 22:31	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		07/25/19 08:28	07/31/19 22:31	1
Hexachloroethane	ND	H	10	4.2	ug/L		07/25/19 08:28	07/31/19 22:31	1
Indene	ND	H	10	1.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
Isophorone	ND	H	10	0.57	ug/L		07/25/19 08:28	07/31/19 22:31	1
2-Methylphenol	ND	H	10	1.8	ug/L		07/25/19 08:28	07/31/19 22:31	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
2-Nitroaniline	ND	H	10	2.2	ug/L		07/25/19 08:28	07/31/19 22:31	1
3-Nitroaniline	ND	H	10	1.8	ug/L		07/25/19 08:28	07/31/19 22:31	1
4-Nitroaniline	ND	H	10	2.5	ug/L		07/25/19 08:28	07/31/19 22:31	1
Nitrobenzene	ND	H	10	0.55	ug/L		07/25/19 08:28	07/31/19 22:31	1
2-Nitrophenol	ND	H	10	0.65	ug/L		07/25/19 08:28	07/31/19 22:31	1
4-Nitrophenol	ND	H	10	2.1	ug/L		07/25/19 08:28	07/31/19 22:31	1
N-Nitrosodimethylamine	ND	H	10	3.5	ug/L		07/25/19 08:28	07/31/19 22:31	1
N-Nitrosodi-n-propylamine	ND	H	10	3.3	ug/L		07/25/19 08:28	07/31/19 22:31	1
N-Nitrosodiphenylamine	ND	H	10	0.47	ug/L		07/25/19 08:28	07/31/19 22:31	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/25/19 08:28	07/31/19 22:31	1
Phenol	ND	H	10	2.6	ug/L		07/25/19 08:28	07/31/19 22:31	1
Pyridine	ND	H	10	3.2	ug/L		07/25/19 08:28	07/31/19 22:31	1
Quinoline	ND	H	10	6.0	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,4,5-Trichlorophenol	ND	H	10	3.7	ug/L		07/25/19 08:28	07/31/19 22:31	1
2,4,6-Trichlorophenol	ND	H	10	3.5	ug/L		07/25/19 08:28	07/31/19 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*34 - 120*	*07/25/19 08:28*	*07/31/19 22:31*	*1*
2-Fluorophenol	*42*		*10 - 120*	*07/25/19 08:28*	*07/31/19 22:31*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*07/25/19 08:28*	*07/31/19 22:31*	*1*
Phenol-d5	*47*		*10 - 120*	*07/25/19 08:28*	*07/31/19 22:31*	*1*
Terphenyl-d14	*52*	*X*	*53 - 125*	*07/25/19 08:28*	*07/31/19 22:31*	*1*
2,4,6-Tribromophenol	*50*		*15 - 135*	*07/25/19 08:28*	*07/31/19 22:31*	*1*

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

Job ID: 400-173131-1

Client Sample ID: P93C-ROX-071219
Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		07/22/19 15:26	07/23/19 07:40	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/22/19 15:26	07/23/19 07:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*07/22/19 15:26*	*07/23/19 07:40*	*1*

Client Sample ID: P93D-ROX-071219
Date Collected: 07/12/19 10:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-13
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			07/20/19 12:08	1
Acrolein	ND		20	10	ug/L			07/20/19 12:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 12:08	1
Benzene	**1.2**		1.0	0.38	ug/L			07/20/19 12:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 12:08	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 12:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 12:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 12:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 12:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 12:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 12:08	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 12:08	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 12:08	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 12:08	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 12:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 12:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 12:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 12:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 12:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 12:08	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 12:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 12:08	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 12:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 12:08	1
Methyl tert-butyl ether	**2.0**		1.0	0.74	ug/L			07/20/19 12:08	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 12:08	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 12:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 12:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 12:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 12:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 12:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 12:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 12:08	1

Client Sample ID: P93D-ROX-071219
Date Collected: 07/12/19 10:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-13
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			07/20/19 12:08	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 12:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 12:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 12:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 12:08	1
Toluene	**0.48**	**J**	1.0	0.41	ug/L			07/20/19 12:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 12:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 12:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 12:08	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 12:08	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 12:08	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 12:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 12:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 12:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 12:08	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 12:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 12:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/20/19 12:08*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/20/19 12:08*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 12:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
Anthracene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Benzo[a]pyrene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Benzo[b]fluoranthene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Benzo[g,h,i]perylene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Chrysene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Dibenz(a,h)anthracene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Fluoranthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
Fluorene	ND		0.20	0.021	ug/L		07/18/19 16:34	07/28/19 19:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.039	ug/L		07/18/19 16:34	07/28/19 19:46	1
Phenanthrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
Pyrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/28/19 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*33 - 138*	*07/18/19 16:34*	*07/28/19 19:46*	*1*
2-Fluorobiphenyl	*90*		*15 - 122*	*07/18/19 16:34*	*07/28/19 19:46*	*1*

Client Sample ID: P93D-ROX-071219
Date Collected: 07/12/19 10:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-13
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	91		19 - 130	07/18/19 16:34	07/28/19 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		07/18/19 16:34	07/20/19 20:56	1
Benzenethiol	ND	* UJ	9.8	1.7	ug/L		07/18/19 16:34	07/20/19 20:56	1
Benzoic acid	ND		29	7.1	ug/L		07/18/19 16:34	07/20/19 20:56	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/18/19 16:34	07/20/19 20:56	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		07/18/19 16:34	07/20/19 20:56	1
Bis(2-chloroethyl)ether	ND	UJ	9.8	0.72	ug/L		07/18/19 16:34	07/20/19 20:56	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		07/18/19 16:34	07/20/19 20:56	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/18/19 16:34	07/20/19 20:56	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		07/18/19 16:34	07/20/19 20:56	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		07/18/19 16:34	07/20/19 20:56	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/18/19 16:34	07/20/19 20:56	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/18/19 16:34	07/20/19 20:56	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		07/18/19 16:34	07/20/19 20:56	1
2-Chlorophenol	ND		9.8	2.2	ug/L		07/18/19 16:34	07/20/19 20:56	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/18/19 16:34	07/20/19 20:56	1
Dibenz[a,h]acridine	ND	UJ	9.8	2.9	ug/L		07/18/19 16:34	07/20/19 20:56	1
Dibenzofuran	ND		9.8	0.51	ug/L		07/18/19 16:34	07/20/19 20:56	1
3,3'-Dichlorobenzidine	ND	*	9.8	2.5	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		07/18/19 16:34	07/20/19 20:56	1
Diethyl phthalate	ND		9.8	0.69	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/18/19 16:34	07/20/19 20:56	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		07/18/19 16:34	07/20/19 20:56	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		07/18/19 16:34	07/20/19 20:56	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/18/19 16:34	07/20/19 20:56	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		07/18/19 16:34	07/20/19 20:56	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/18/19 16:34	07/20/19 20:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/18/19 16:34	07/20/19 20:56	1
Hexachlorobenzene	ND		9.8	0.24	ug/L		07/18/19 16:34	07/20/19 20:56	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		07/18/19 16:34	07/20/19 20:56	1
Hexachloroethane	ND	* UJ	9.8	4.1	ug/L		07/18/19 16:34	07/20/19 20:56	1
Indene	ND		9.8	0.98	ug/L		07/18/19 16:34	07/20/19 20:56	1
Isophorone	ND		9.8	0.56	ug/L		07/18/19 16:34	07/20/19 20:56	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/18/19 16:34	07/20/19 20:56	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/18/19 16:34	07/20/19 20:56	1
2-Nitroaniline	ND		9.8	2.2	ug/L		07/18/19 16:34	07/20/19 20:56	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/18/19 16:34	07/20/19 20:56	1
4-Nitroaniline	ND		9.8	2.4	ug/L		07/18/19 16:34	07/20/19 20:56	1
Nitrobenzene	ND		9.8	0.54	ug/L		07/18/19 16:34	07/20/19 20:56	1
2-Nitrophenol	ND		9.8	0.64	ug/L		07/18/19 16:34	07/20/19 20:56	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/18/19 16:34	07/20/19 20:56	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/18/19 16:34	07/20/19 20:56	1

Client Sample ID: P93D-ROX-071219
Date Collected: 07/12/19 10:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		07/18/19 16:34	07/20/19 20:56	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		07/18/19 16:34	07/20/19 20:56	1
Pentachlorophenol	ND		20	1.8	ug/L		07/18/19 16:34	07/20/19 20:56	1
Phenol	ND		9.8	2.5	ug/L		07/18/19 16:34	07/20/19 20:56	1
Pyridine	ND		9.8	3.1	ug/L		07/18/19 16:34	07/20/19 20:56	1
Quinoline	ND		9.8	5.9	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/18/19 16:34	07/20/19 20:56	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/19 16:34	07/20/19 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*34 - 120*	*07/18/19 16:34*	*07/20/19 20:56*	*1*
2-Fluorophenol	*42*		*10 - 120*	*07/18/19 16:34*	*07/20/19 20:56*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*07/18/19 16:34*	*07/20/19 20:56*	*1*
Phenol-d5	*56*		*10 - 120*	*07/18/19 16:34*	*07/20/19 20:56*	*1*
Terphenyl-d14	*54*		*53 - 125*	*07/18/19 16:34*	*07/20/19 20:56*	*1*
2,4,6-Tribromophenol	*62*		*15 - 135*	*07/18/19 16:34*	*07/20/19 20:56*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		07/22/19 13:44	07/22/19 21:10	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/22/19 13:44	07/22/19 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*07/22/19 13:44*	*07/22/19 21:10*	*1*

Client Sample ID: P93B-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		6300	2500	ug/L			07/20/19 19:10	250
Acrolein	ND		5000	2500	ug/L			07/20/19 19:10	250
Acrylonitrile	ND		2500	700	ug/L			07/20/19 19:10	250
Bromobenzene	ND		250	140	ug/L			07/20/19 19:10	250
Bromochloromethane	ND		250	130	ug/L			07/20/19 19:10	250
Bromodichloromethane	ND		250	130	ug/L			07/20/19 19:10	250
Bromoform	ND		1300	180	ug/L			07/20/19 19:10	250
Bromomethane	ND		250	250	ug/L			07/20/19 19:10	250
2-Butanone (MEK)	ND		6300	650	ug/L			07/20/19 19:10	250
Carbon disulfide	ND		250	130	ug/L			07/20/19 19:10	250
Carbon tetrachloride	ND		250	130	ug/L			07/20/19 19:10	250
Chlorobenzene	ND		250	130	ug/L			07/20/19 19:10	250
Dibromochloromethane	ND		250	130	ug/L			07/20/19 19:10	250
Chloroethane	ND		250	190	ug/L			07/20/19 19:10	250
2-Chloroethyl vinyl ether	ND		1300	500	ug/L			07/20/19 19:10	250
Chloroform	ND		250	150	ug/L			07/20/19 19:10	250
1-Chlorohexane	ND		250	180	ug/L			07/20/19 19:10	250
Chloromethane	ND		250	210	ug/L			07/20/19 19:10	250
cis-1,2-Dichloroethene	ND		250	130	ug/L			07/20/19 19:10	250
cis-1,3-Dichloropropene	ND		1300	130	ug/L			07/20/19 19:10	250
1,2-Dichlorobenzene	ND		250	130	ug/L			07/20/19 19:10	250
1,3-Dichlorobenzene	ND		250	140	ug/L			07/20/19 19:10	250
1,4-Dichlorobenzene	ND		250	160	ug/L			07/20/19 19:10	250
Dichlorodifluoromethane	ND		250	210	ug/L			07/20/19 19:10	250
1,1-Dichloroethane	ND		250	130	ug/L			07/20/19 19:10	250
1,2-Dichloroethane	ND		250	130	ug/L			07/20/19 19:10	250
1,1-Dichloroethene	ND		250	130	ug/L			07/20/19 19:10	250
1,2-Dichloropropane	ND		250	130	ug/L			07/20/19 19:10	250
1,3-Dichloropropane	ND		250	130	ug/L			07/20/19 19:10	250
2,2-Dichloropropane	ND		250	130	ug/L			07/20/19 19:10	250
1,1-Dichloropropene	ND		250	130	ug/L			07/20/19 19:10	250
Ethylbenzene	ND		250	130	ug/L			07/20/19 19:10	250
Ethyl methacrylate	ND		250	150	ug/L			07/20/19 19:10	250
Hexachlorobutadiene	ND		1300	230	ug/L			07/20/19 19:10	250
2-Hexanone	ND		6300	780	ug/L			07/20/19 19:10	250
Isopropylbenzene	ND		250	130	ug/L			07/20/19 19:10	250
Methylene bromide	ND		1300	150	ug/L			07/20/19 19:10	250
Methylene Chloride	ND		1300	750	ug/L			07/20/19 19:10	250
4-Methyl-2-pentanone (MIBK)	ND		6300	450	ug/L			07/20/19 19:10	250
Methyl tert-butyl ether	ND		250	190	ug/L			07/20/19 19:10	250
m-Xylene & p-Xylene	ND		1300	400	ug/L			07/20/19 19:10	250
Naphthalene	ND		250	250	ug/L			07/20/19 19:10	250
n-Butylbenzene	ND		250	190	ug/L			07/20/19 19:10	250
N-Propylbenzene	ND		250	170	ug/L			07/20/19 19:10	250
o-Chlorotoluene	ND		250	140	ug/L			07/20/19 19:10	250
o-Xylene	ND		1300	150	ug/L			07/20/19 19:10	250
p-Chlorotoluene	ND		250	140	ug/L			07/20/19 19:10	250
p-Isopropyltoluene	ND		250	180	ug/L			07/20/19 19:10	250
sec-Butylbenzene	ND		250	180	ug/L			07/20/19 19:10	250

Client Sample ID: P93B-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		250	250	ug/L			07/20/19 19:10	250
tert-Butylbenzene	ND		250	160	ug/L			07/20/19 19:10	250
1,1,1,2-Tetrachloroethane	ND		250	130	ug/L			07/20/19 19:10	250
1,1,2,2-Tetrachloroethane	ND		250	130	ug/L			07/20/19 19:10	250
Tetrachloroethene	ND		250	150	ug/L			07/20/19 19:10	250
Toluene	**320**		250	100	ug/L			07/20/19 19:10	250
trans-1,2-Dichloroethene	ND		250	130	ug/L			07/20/19 19:10	250
trans-1,3-Dichloropropene	ND		1300	130	ug/L			07/20/19 19:10	250
1,2,3-Trichlorobenzene	ND		250	180	ug/L			07/20/19 19:10	250
1,2,4-Trichlorobenzene	ND		250	210	ug/L			07/20/19 19:10	250
1,1,1-Trichloroethane	ND		250	130	ug/L			07/20/19 19:10	250
1,1,2-Trichloroethane	ND		1300	130	ug/L			07/20/19 19:10	250
Trichloroethene	ND		250	130	ug/L			07/20/19 19:10	250
Trichlorofluoromethane	ND		250	130	ug/L			07/20/19 19:10	250
1,2,3-Trichloropropane	ND		1300	210	ug/L			07/20/19 19:10	250
1,2,4-Trimethylbenzene	ND		250	210	ug/L			07/20/19 19:10	250
1,3,5-Trimethylbenzene	ND		250	140	ug/L			07/20/19 19:10	250
Vinyl acetate	ND		6300	500	ug/L			07/20/19 19:10	250
Vinyl chloride	ND		250	130	ug/L			07/20/19 19:10	250
Xylenes, Total	ND		2500	400	ug/L			07/20/19 19:10	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/20/19 19:10*	*250*
Dibromofluoromethane	*90*		*81 - 121*		*07/20/19 19:10*	*250*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/20/19 19:10*	*250*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**170000**	J	1000	380	ug/L			07/21/19 17:54	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/21/19 17:54*	*1000*
Dibromofluoromethane	*96*		*81 - 121*		*07/21/19 17:54*	*1000*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/21/19 17:54*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
Acenaphthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
Acenaphthylene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
Anthracene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
Anthracene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Benzo[a]anthracene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/05/19 14:39	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Benzo[a]pyrene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/02/19 19:45	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Benzo[b]fluoranthene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/02/19 19:45	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1

Client Sample ID: P93B-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14
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
Benzo[g,h,i]perylene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/02/19 19:45	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Benzo[k]fluoranthene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/02/19 19:45	1
Chrysene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Chrysene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/05/19 14:39	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Dibenz(a,h)anthracene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/02/19 19:45	1
Fluoranthene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
Fluoranthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
Fluorene	ND		0.19	0.020	ug/L		07/17/19 14:25	07/31/19 15:38	1
Fluorene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		07/17/19 14:25	07/31/19 15:38	1
Indeno[1,2,3-cd]pyrene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:28	08/02/19 19:45	1
Phenanthrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
Phenanthrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
Pyrene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
Pyrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/05/19 14:39	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
1-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:45	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		07/17/19 14:25	07/31/19 15:38	1
2-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X*	*33 - 138*	*07/17/19 14:25*	*07/31/19 15:38*	*1*
Terphenyl-d14	*47*		*33 - 138*	*07/25/19 08:28*	*08/05/19 14:39*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 15:38*	*1*
2-Fluorobiphenyl	*51*		*15 - 122*	*07/25/19 08:28*	*08/05/19 14:39*	*1*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*07/31/19 15:38*	*1*
Nitrobenzene-d5	*80*		*19 - 130*	*07/25/19 08:28*	*08/02/19 19:45*	*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		07/17/19 14:25	07/22/19 18:31	1
Benzenethiol	ND	*	9.7	1.7	ug/L		07/17/19 14:25	07/22/19 18:31	1
Benzoic acid	ND		29	7.1	ug/L		07/17/19 14:25	07/22/19 18:31	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/17/19 14:25	07/22/19 18:31	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		07/17/19 14:25	07/22/19 18:31	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		07/17/19 14:25	07/22/19 18:31	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/17/19 14:25	07/22/19 18:31	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/17/19 14:25	07/22/19 18:31	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/17/19 14:25	07/22/19 18:31	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/17/19 14:25	07/22/19 18:31	1
2-Chloronaphthalene	ND		9.7	0.51	ug/L		07/17/19 14:25	07/22/19 18:31	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/17/19 14:25	07/22/19 18:31	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
Dibenzofuran	ND		9.7	0.51	ug/L		07/17/19 14:25	07/22/19 18:31	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/17/19 14:25	07/22/19 18:31	1

Client Sample ID: P93B-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/17/19 14:25	07/22/19 18:31	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/17/19 14:25	07/22/19 18:31	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/17/19 14:25	07/22/19 18:31	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/17/19 14:25	07/22/19 18:31	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/22/19 18:31	1
2,4-Dinitrotoluene	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
2,6-Dinitrotoluene	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 18:31	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		07/17/19 14:25	07/22/19 18:31	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/17/19 14:25	07/22/19 18:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/17/19 14:25	07/22/19 18:31	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/17/19 14:25	07/22/19 18:31	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/22/19 18:31	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/17/19 14:25	07/22/19 18:31	1
Indene	ND		9.7	0.97	ug/L		07/17/19 14:25	07/22/19 18:31	1
Isophorone	ND		9.7	0.56	ug/L		07/17/19 14:25	07/22/19 18:31	1
2-Methylphenol	ND		9.7	1.8	ug/L		07/17/19 14:25	07/22/19 18:31	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/17/19 14:25	07/22/19 18:31	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/17/19 14:25	07/22/19 18:31	1
3-Nitroaniline	ND		9.7	1.8	ug/L		07/17/19 14:25	07/22/19 18:31	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/17/19 14:25	07/22/19 18:31	1
Nitrobenzene	ND		9.7	0.54	ug/L		07/17/19 14:25	07/22/19 18:31	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/17/19 14:25	07/22/19 18:31	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/17/19 14:25	07/22/19 18:31	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/17/19 14:25	07/22/19 18:31	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/17/19 14:25	07/22/19 18:31	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		07/17/19 14:25	07/22/19 18:31	1
Pentachlorophenol	ND		19	1.8	ug/L		07/17/19 14:25	07/22/19 18:31	1
Phenol	**13**		9.7	2.5	ug/L		07/17/19 14:25	07/22/19 18:31	1
Pyridine	ND		9.7	3.1	ug/L		07/17/19 14:25	07/22/19 18:31	1
Quinoline	ND		9.7	5.8	ug/L		07/17/19 14:25	07/22/19 18:31	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/17/19 14:25	07/22/19 18:31	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/17/19 14:25	07/22/19 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/22/19 18:31*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/22/19 18:31*	*1*
Nitrobenzene-d5	*2*	*X*	*27 - 120*	*07/17/19 14:25*	*07/22/19 18:31*	*1*
Phenol-d5	*0.3*	*X*	*10 - 120*	*07/17/19 14:25*	*07/22/19 18:31*	*1*
Terphenyl-d14	*0.3*	*X*	*53 - 125*	*07/17/19 14:25*	*07/22/19 18:31*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/22/19 18:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.8	3.7	ug/L		07/25/19 08:28	08/01/19 23:47	1
Benzenethiol	ND	H	9.8	1.7	ug/L		07/25/19 08:28	08/01/19 23:47	1
Benzoic acid	ND	H *	29	7.1	ug/L		07/25/19 08:28	08/01/19 23:47	1
Benzyl alcohol	ND	H	9.8	2.0	ug/L		07/25/19 08:28	08/01/19 23:47	1

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

Job ID: 400-173131-1

Client Sample ID: P93B-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND	H	9.8	0.67	ug/L		07/25/19 08:28	08/01/19 23:47	1
Bis(2-chloroethyl)ether	ND	H	9.8	0.72	ug/L		07/25/19 08:28	08/01/19 23:47	1
bis (2-chloroisopropyl) ether	ND	H	9.8	0.79	ug/L		07/25/19 08:28	08/01/19 23:47	1
Bis(2-ethylhexyl) phthalate	ND	H	9.8	4.9	ug/L		07/25/19 08:28	08/01/19 23:47	1
4-Bromophenyl phenyl ether	ND	H	9.8	0.31	ug/L		07/25/19 08:28	08/01/19 23:47	1
Butyl benzyl phthalate	ND	H	9.8	0.67	ug/L		07/25/19 08:28	08/01/19 23:47	1
4-Chloroaniline	ND	H	9.8	3.3	ug/L		07/25/19 08:28	08/01/19 23:47	1
4-Chloro-3-methylphenol	ND	H	9.8	3.7	ug/L		07/25/19 08:28	08/01/19 23:47	1
2-Chloronaphthalene	ND	H	9.8	0.51	ug/L		07/25/19 08:28	08/01/19 23:47	1
2-Chlorophenol	ND	H	9.8	2.1	ug/L		07/25/19 08:28	08/01/19 23:47	1
4-Chlorophenyl phenyl ether	ND	H	9.8	2.0	ug/L		07/25/19 08:28	08/01/19 23:47	1
Dibenz[a,h]acridine	ND	H	9.8	2.9	ug/L		07/25/19 08:28	08/01/19 23:47	1
Dibenzofuran	ND	H	9.8	0.51	ug/L		07/25/19 08:28	08/01/19 23:47	1
3,3'-Dichlorobenzidine	ND	H	9.8	2.5	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,4-Dichlorophenol	ND	H	9.8	2.9	ug/L		07/25/19 08:28	08/01/19 23:47	1
Diethyl phthalate	ND	H	9.8	0.68	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,4-Dimethylphenol	ND	H	9.8	3.4	ug/L		07/25/19 08:28	08/01/19 23:47	1
Dimethyl phthalate	ND	H	9.8	0.59	ug/L		07/25/19 08:28	08/01/19 23:47	1
Di-n-butyl phthalate	ND	H	9.8	2.6	ug/L		07/25/19 08:28	08/01/19 23:47	1
4,6-Dinitro-ortho-cresol	ND	H	9.8	2.0	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,4-Dinitrophenol	ND	H	29	3.3	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,4-Dinitrotoluene	ND	H *	9.8	1.9	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,6-Dinitrotoluene	ND	H *	9.8	1.9	ug/L		07/25/19 08:28	08/01/19 23:47	1
Di-n-octyl phthalate	ND	H	9.8	0.43	ug/L		07/25/19 08:28	08/01/19 23:47	1
1,4-Dioxane	ND	H	9.8	0.98	ug/L		07/25/19 08:28	08/01/19 23:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.8	0.98	ug/L		07/25/19 08:28	08/01/19 23:47	1
Hexachlorobenzene	ND	H	9.8	0.24	ug/L		07/25/19 08:28	08/01/19 23:47	1
Hexachlorocyclopentadiene	ND	H	20	2.5	ug/L		07/25/19 08:28	08/01/19 23:47	1
Hexachloroethane	ND	H	9.8	4.1	ug/L		07/25/19 08:28	08/01/19 23:47	1
Indene	ND	H	9.8	0.98	ug/L		07/25/19 08:28	08/01/19 23:47	1
Isophorone	ND	H	9.8	0.56	ug/L		07/25/19 08:28	08/01/19 23:47	1
2-Methylphenol	ND	H	9.8	1.8	ug/L		07/25/19 08:28	08/01/19 23:47	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/25/19 08:28	08/01/19 23:47	1
2-Nitroaniline	ND	H	9.8	2.1	ug/L		07/25/19 08:28	08/01/19 23:47	1
3-Nitroaniline	ND	H	9.8	1.8	ug/L		07/25/19 08:28	08/01/19 23:47	1
4-Nitroaniline	ND	H	9.8	2.4	ug/L		07/25/19 08:28	08/01/19 23:47	1
Nitrobenzene	ND	H	9.8	0.54	ug/L		07/25/19 08:28	08/01/19 23:47	1
2-Nitrophenol	ND	H	9.8	0.63	ug/L		07/25/19 08:28	08/01/19 23:47	1
4-Nitrophenol	ND	H	9.8	2.0	ug/L		07/25/19 08:28	08/01/19 23:47	1
N-Nitrosodimethylamine	ND	H	9.8	3.4	ug/L		07/25/19 08:28	08/01/19 23:47	1
N-Nitrosodi-n-propylamine	ND	H	9.8	3.2	ug/L		07/25/19 08:28	08/01/19 23:47	1
N-Nitrosodiphenylamine	ND	H	9.8	0.46	ug/L		07/25/19 08:28	08/01/19 23:47	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/25/19 08:28	08/01/19 23:47	1
Phenol	**260**	**H**	98	25	ug/L		07/25/19 08:28	08/02/19 21:03	10
Pyridine	ND	H	9.8	3.1	ug/L		07/25/19 08:28	08/01/19 23:47	1
Quinoline	ND	H	9.8	5.9	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,4,5-Trichlorophenol	ND	H	9.8	3.6	ug/L		07/25/19 08:28	08/01/19 23:47	1
2,4,6-Trichlorophenol	ND	H	9.8	3.4	ug/L		07/25/19 08:28	08/01/19 23:47	1

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

Job ID: 400-173131-1

Client Sample ID: P93B-ROX-071219
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	52		34 - 120	07/25/19 08:28	08/01/19 23:47	1
2-Fluorophenol	38		10 - 120	07/25/19 08:28	08/01/19 23:47	1
Nitrobenzene-d5	90		27 - 120	07/25/19 08:28	08/01/19 23:47	1
Phenol-d5	75		10 - 120	07/25/19 08:28	08/01/19 23:47	1
Terphenyl-d14	52	X	53 - 125	07/25/19 08:28	08/01/19 23:47	1
2,4,6-Tribromophenol	60		15 - 135	07/25/19 08:28	08/01/19 23:47	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		07/22/19 13:44	07/22/19 21:33	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/22/19 13:44	07/22/19 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		51 - 149	07/22/19 13:44	07/22/19 21:33	1

Client Sample ID: P93B-ROX-071219-DUP
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		6300	2500	ug/L			07/20/19 19:37	250
Acrolein	ND		5000	2500	ug/L			07/20/19 19:37	250
Acrylonitrile	ND		2500	700	ug/L			07/20/19 19:37	250
Bromobenzene	ND		250	140	ug/L			07/20/19 19:37	250
Bromochloromethane	ND		250	130	ug/L			07/20/19 19:37	250
Bromodichloromethane	ND		250	130	ug/L			07/20/19 19:37	250
Bromoform	ND		1300	180	ug/L			07/20/19 19:37	250
Bromomethane	ND		250	250	ug/L			07/20/19 19:37	250
2-Butanone (MEK)	ND		6300	650	ug/L			07/20/19 19:37	250
Carbon disulfide	ND		250	130	ug/L			07/20/19 19:37	250
Carbon tetrachloride	ND		250	130	ug/L			07/20/19 19:37	250
Chlorobenzene	ND		250	130	ug/L			07/20/19 19:37	250
Dibromochloromethane	ND		250	130	ug/L			07/20/19 19:37	250
Chloroethane	ND		250	190	ug/L			07/20/19 19:37	250
2-Chloroethyl vinyl ether	ND		1300	500	ug/L			07/20/19 19:37	250
Chloroform	ND		250	150	ug/L			07/20/19 19:37	250
1-Chlorohexane	ND		250	180	ug/L			07/20/19 19:37	250
Chloromethane	ND		250	210	ug/L			07/20/19 19:37	250
cis-1,2-Dichloroethene	ND		250	130	ug/L			07/20/19 19:37	250
cis-1,3-Dichloropropene	ND		1300	130	ug/L			07/20/19 19:37	250
1,2-Dichlorobenzene	ND		250	130	ug/L			07/20/19 19:37	250
1,3-Dichlorobenzene	ND		250	140	ug/L			07/20/19 19:37	250
1,4-Dichlorobenzene	ND		250	160	ug/L			07/20/19 19:37	250
Dichlorodifluoromethane	ND		250	210	ug/L			07/20/19 19:37	250
1,1-Dichloroethane	ND		250	130	ug/L			07/20/19 19:37	250
1,2-Dichloroethane	ND		250	130	ug/L			07/20/19 19:37	250
1,1-Dichloroethene	ND		250	130	ug/L			07/20/19 19:37	250
1,2-Dichloropropane	ND		250	130	ug/L			07/20/19 19:37	250
1,3-Dichloropropane	ND		250	130	ug/L			07/20/19 19:37	250
2,2-Dichloropropane	ND		250	130	ug/L			07/20/19 19:37	250
1,1-Dichloropropene	ND		250	130	ug/L			07/20/19 19:37	250
Ethylbenzene	ND		250	130	ug/L			07/20/19 19:37	250
Ethyl methacrylate	ND		250	150	ug/L			07/20/19 19:37	250
Hexachlorobutadiene	ND		1300	230	ug/L			07/20/19 19:37	250
2-Hexanone	ND		6300	780	ug/L			07/20/19 19:37	250
Isopropylbenzene	ND		250	130	ug/L			07/20/19 19:37	250
Methylene bromide	ND		1300	150	ug/L			07/20/19 19:37	250
Methylene Chloride	ND		1300	750	ug/L			07/20/19 19:37	250
4-Methyl-2-pentanone (MIBK)	ND		6300	450	ug/L			07/20/19 19:37	250
Methyl tert-butyl ether	ND		250	190	ug/L			07/20/19 19:37	250
m-Xylene & p-Xylene	ND		1300	400	ug/L			07/20/19 19:37	250
Naphthalene	ND		250	250	ug/L			07/20/19 19:37	250
n-Butylbenzene	ND		250	190	ug/L			07/20/19 19:37	250
N-Propylbenzene	ND		250	170	ug/L			07/20/19 19:37	250
o-Chlorotoluene	ND		250	140	ug/L			07/20/19 19:37	250
o-Xylene	ND		1300	150	ug/L			07/20/19 19:37	250
p-Chlorotoluene	ND		250	140	ug/L			07/20/19 19:37	250
p-Isopropyltoluene	ND		250	180	ug/L			07/20/19 19:37	250
sec-Butylbenzene	ND		250	180	ug/L			07/20/19 19:37	250

Client Sample ID: P93B-ROX-071219-DUP

Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		250	250	ug/L			07/20/19 19:37	250
tert-Butylbenzene	ND		250	160	ug/L			07/20/19 19:37	250
1,1,1,2-Tetrachloroethane	ND		250	130	ug/L			07/20/19 19:37	250
1,1,2,2-Tetrachloroethane	ND		250	130	ug/L			07/20/19 19:37	250
Tetrachloroethene	ND		250	150	ug/L			07/20/19 19:37	250
Toluene	**360**		250	100	ug/L			07/20/19 19:37	250
trans-1,2-Dichloroethene	ND		250	130	ug/L			07/20/19 19:37	250
trans-1,3-Dichloropropene	ND		1300	130	ug/L			07/20/19 19:37	250
1,2,3-Trichlorobenzene	ND		250	180	ug/L			07/20/19 19:37	250
1,2,4-Trichlorobenzene	ND		250	210	ug/L			07/20/19 19:37	250
1,1,1-Trichloroethane	ND		250	130	ug/L			07/20/19 19:37	250
1,1,2-Trichloroethane	ND		1300	130	ug/L			07/20/19 19:37	250
Trichloroethene	ND		250	130	ug/L			07/20/19 19:37	250
Trichlorofluoromethane	ND		250	130	ug/L			07/20/19 19:37	250
1,2,3-Trichloropropane	ND		1300	210	ug/L			07/20/19 19:37	250
1,2,4-Trimethylbenzene	ND		250	210	ug/L			07/20/19 19:37	250
1,3,5-Trimethylbenzene	ND		250	140	ug/L			07/20/19 19:37	250
Vinyl acetate	ND		6300	500	ug/L			07/20/19 19:37	250
Vinyl chloride	ND		250	130	ug/L			07/20/19 19:37	250
Xylenes, Total	ND		2500	400	ug/L			07/20/19 19:37	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*78 - 118*		*07/20/19 19:37*	*250*
Dibromofluoromethane	*89*		*81 - 121*		*07/20/19 19:37*	*250*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/20/19 19:37*	*250*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**220000**	J	1000	380	ug/L			07/21/19 18:21	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*07/21/19 18:21*	*1000*
Dibromofluoromethane	*96*		*81 - 121*		*07/21/19 18:21*	*1000*
Toluene-d8 (Surr)	*101*		*80 - 120*		*07/21/19 18:21*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
Acenaphthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
Acenaphthylene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
Anthracene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
Anthracene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
Benzo[a]anthracene	ND	*	0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Benzo[a]anthracene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Benzo[a]pyrene	ND		0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Benzo[a]pyrene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Benzo[b]fluoranthene	ND		0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Benzo[b]fluoranthene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Benzo[g,h,i]perylene	ND		0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1

Client Sample ID: P93B-ROX-071219-DUP
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Benzo[k]fluoranthene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Chrysene	ND	*	0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Chrysene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Dibenz(a,h)anthracene	ND		0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Dibenz(a,h)anthracene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Fluoranthene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
Fluoranthene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
Fluorene	ND		0.20	0.021	ug/L		07/17/19 14:25	07/31/19 15:57	1
Fluorene	ND	H UJ	0.20	0.021	ug/L		07/25/19 08:36	08/02/19 20:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.039	ug/L		07/17/19 14:25	07/31/19 15:57	1
Indeno[1,2,3-cd]pyrene	ND	H UJ	0.20	0.039	ug/L		07/25/19 08:36	08/02/19 20:01	1
Phenanthrene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
Phenanthrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
Pyrene	ND	*	0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
Pyrene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
1-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 15:57	1
2-Methylnaphthalene	ND	H UJ	0.20	0.020	ug/L		07/25/19 08:36	08/02/19 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*0*	*X **	*33 - 138*	*07/17/19 14:25*	*07/31/19 15:57*	*1*
Terphenyl-d14	*76*		*33 - 138*	*07/25/19 08:36*	*08/02/19 20:01*	*1*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*07/31/19 15:57*	*1*
2-Fluorobiphenyl	*84*		*15 - 122*	*07/25/19 08:36*	*08/02/19 20:01*	*1*
Nitrobenzene-d5	*0*	*X*	*19 - 130*	*07/17/19 14:25*	*07/31/19 15:57*	*1*
Nitrobenzene-d5	*72*		*19 - 130*	*07/25/19 08:36*	*08/02/19 20:01*	*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		07/17/19 14:25	07/22/19 18:52	1
Benzenethiol	ND	*	9.8	1.7	ug/L		07/17/19 14:25	07/22/19 18:52	1
Benzoic acid	ND		29	7.1	ug/L		07/17/19 14:25	07/22/19 18:52	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/17/19 14:25	07/22/19 18:52	1
Bis(2-chloroethoxy)methane	ND		9.8	0.67	ug/L		07/17/19 14:25	07/22/19 18:52	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		07/17/19 14:25	07/22/19 18:52	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		07/17/19 14:25	07/22/19 18:52	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/17/19 14:25	07/22/19 18:52	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		07/17/19 14:25	07/22/19 18:52	1
Butyl benzyl phthalate	ND		9.8	0.67	ug/L		07/17/19 14:25	07/22/19 18:52	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/17/19 14:25	07/22/19 18:52	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/17/19 14:25	07/22/19 18:52	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		07/17/19 14:25	07/22/19 18:52	1
2-Chlorophenol	ND		9.8	2.1	ug/L		07/17/19 14:25	07/22/19 18:52	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/17/19 14:25	07/22/19 18:52	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		07/17/19 14:25	07/22/19 18:52	1
Dibenzofuran	ND		9.8	0.51	ug/L		07/17/19 14:25	07/22/19 18:52	1
3,3'-Dichlorobenzidine	ND	*	9.8	2.5	ug/L		07/17/19 14:25	07/22/19 18:52	1

Client Sample ID: P93B-ROX-071219-DUP
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		07/17/19 14:25	07/22/19 18:52	1
Diethyl phthalate	ND		9.8	0.68	ug/L		07/17/19 14:25	07/22/19 18:52	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/17/19 14:25	07/22/19 18:52	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		07/17/19 14:25	07/22/19 18:52	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		07/17/19 14:25	07/22/19 18:52	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		07/17/19 14:25	07/22/19 18:52	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/22/19 18:52	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/17/19 14:25	07/22/19 18:52	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/17/19 14:25	07/22/19 18:52	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		07/17/19 14:25	07/22/19 18:52	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/17/19 14:25	07/22/19 18:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/17/19 14:25	07/22/19 18:52	1
Hexachlorobenzene	ND		9.8	0.24	ug/L		07/17/19 14:25	07/22/19 18:52	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		07/17/19 14:25	07/22/19 18:52	1
Hexachloroethane	ND		9.8	4.1	ug/L		07/17/19 14:25	07/22/19 18:52	1
Indene	ND		9.8	0.98	ug/L		07/17/19 14:25	07/22/19 18:52	1
Isophorone	ND		9.8	0.56	ug/L		07/17/19 14:25	07/22/19 18:52	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/17/19 14:25	07/22/19 18:52	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/17/19 14:25	07/22/19 18:52	1
2-Nitroaniline	ND		9.8	2.1	ug/L		07/17/19 14:25	07/22/19 18:52	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/17/19 14:25	07/22/19 18:52	1
4-Nitroaniline	ND		9.8	2.4	ug/L		07/17/19 14:25	07/22/19 18:52	1
Nitrobenzene	ND		9.8	0.54	ug/L		07/17/19 14:25	07/22/19 18:52	1
2-Nitrophenol	ND		9.8	0.63	ug/L		07/17/19 14:25	07/22/19 18:52	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/17/19 14:25	07/22/19 18:52	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/17/19 14:25	07/22/19 18:52	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		07/17/19 14:25	07/22/19 18:52	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		07/17/19 14:25	07/22/19 18:52	1
Pentachlorophenol	ND		20	1.8	ug/L		07/17/19 14:25	07/22/19 18:52	1
Pyridine	ND		9.8	3.1	ug/L		07/17/19 14:25	07/22/19 18:52	1
Quinoline	ND		9.8	5.9	ug/L		07/17/19 14:25	07/22/19 18:52	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/17/19 14:25	07/22/19 18:52	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/17/19 14:25	07/22/19 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/22/19 18:52*	*1*
2-Fluorophenol	*4*	*X*	*10 - 120*	*07/17/19 14:25*	*07/22/19 18:52*	*1*
Nitrobenzene-d5	*2*	*X*	*27 - 120*	*07/17/19 14:25*	*07/22/19 18:52*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/22/19 18:52*	*1*
Terphenyl-d14	*0*	*X*	*53 - 125*	*07/17/19 14:25*	*07/22/19 18:52*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/22/19 18:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	200		49	13	ug/L		07/17/19 14:25	07/23/19 23:08	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.7	ug/L		07/25/19 08:36	08/02/19 00:08	1

Client Sample ID: P93B-ROX-071219-DUP
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND	H	9.9	1.7	ug/L		07/25/19 08:36	08/02/19 00:08	1
Benzoic acid	ND	H *	30	7.2	ug/L		07/25/19 08:36	08/02/19 00:08	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		07/25/19 08:36	08/02/19 00:08	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.68	ug/L		07/25/19 08:36	08/02/19 00:08	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.73	ug/L		07/25/19 08:36	08/02/19 00:08	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		07/25/19 08:36	08/02/19 00:08	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	4.9	ug/L		07/25/19 08:36	08/02/19 00:08	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		07/25/19 08:36	08/02/19 00:08	1
Butyl benzyl phthalate	ND	H	9.9	0.68	ug/L		07/25/19 08:36	08/02/19 00:08	1
4-Chloroaniline	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 00:08	1
4-Chloro-3-methylphenol	ND	H	9.9	3.7	ug/L		07/25/19 08:36	08/02/19 00:08	1
2-Chloronaphthalene	ND	H	9.9	0.51	ug/L		07/25/19 08:36	08/02/19 00:08	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		07/25/19 08:36	08/02/19 00:08	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		07/25/19 08:36	08/02/19 00:08	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		07/25/19 08:36	08/02/19 00:08	1
Dibenzofuran	ND	H	9.9	0.51	ug/L		07/25/19 08:36	08/02/19 00:08	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		07/25/19 08:36	08/02/19 00:08	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		07/25/19 08:36	08/02/19 00:08	1
Diethyl phthalate	ND	H	9.9	0.69	ug/L		07/25/19 08:36	08/02/19 00:08	1
2,4-Dimethylphenol	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 00:08	1
Dimethyl phthalate	ND	H	9.9	0.59	ug/L		07/25/19 08:36	08/02/19 00:08	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		07/25/19 08:36	08/02/19 00:08	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		07/25/19 08:36	08/02/19 00:08	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		07/25/19 08:36	08/02/19 00:08	1
2,4-Dinitrotoluene	ND	H *	9.9	1.9	ug/L		07/25/19 08:36	08/02/19 00:08	1
2,6-Dinitrotoluene	ND	H *	9.9	1.9	ug/L		07/25/19 08:36	08/02/19 00:08	1
Di-n-octyl phthalate	ND	H	9.9	0.43	ug/L		07/25/19 08:36	08/02/19 00:08	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		07/25/19 08:36	08/02/19 00:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		07/25/19 08:36	08/02/19 00:08	1
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		07/25/19 08:36	08/02/19 00:08	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		07/25/19 08:36	08/02/19 00:08	1
Hexachloroethane	ND	H	9.9	4.1	ug/L		07/25/19 08:36	08/02/19 00:08	1
Indene	ND	H	9.9	0.99	ug/L		07/25/19 08:36	08/02/19 00:08	1
Isophorone	ND	H	9.9	0.56	ug/L		07/25/19 08:36	08/02/19 00:08	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		07/25/19 08:36	08/02/19 00:08	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		07/25/19 08:36	08/02/19 00:08	1
2-Nitroaniline	ND	H	9.9	2.2	ug/L		07/25/19 08:36	08/02/19 00:08	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		07/25/19 08:36	08/02/19 00:08	1
4-Nitroaniline	ND	H	9.9	2.4	ug/L		07/25/19 08:36	08/02/19 00:08	1
Nitrobenzene	ND	H	9.9	0.54	ug/L		07/25/19 08:36	08/02/19 00:08	1
2-Nitrophenol	ND	H	9.9	0.64	ug/L		07/25/19 08:36	08/02/19 00:08	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		07/25/19 08:36	08/02/19 00:08	1
N-Nitrosodimethylamine	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 00:08	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		07/25/19 08:36	08/02/19 00:08	1
N-Nitrosodiphenylamine	ND	H	9.9	0.46	ug/L		07/25/19 08:36	08/02/19 00:08	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/25/19 08:36	08/02/19 00:08	1
Phenol	**240**	**H**	99	26	ug/L		07/25/19 08:36	08/02/19 21:27	10
Pyridine	ND	H	9.9	3.2	ug/L		07/25/19 08:36	08/02/19 00:08	1
Quinoline	ND	H	9.9	5.9	ug/L		07/25/19 08:36	08/02/19 00:08	1

Client Sample ID: P93B-ROX-071219-DUP
Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	H	9.9	3.6	ug/L		07/25/19 08:36	08/02/19 00:08	1
2,4,6-Trichlorophenol	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*34 - 120*	*07/25/19 08:36*	*08/02/19 00:08*	*1*
2-Fluorophenol	*44*		*10 - 120*	*07/25/19 08:36*	*08/02/19 00:08*	*1*
Nitrobenzene-d5	*85*		*27 - 120*	*07/25/19 08:36*	*08/02/19 00:08*	*1*
Phenol-d5	*71*		*10 - 120*	*07/25/19 08:36*	*08/02/19 00:08*	*1*
Terphenyl-d14	*42*	*X*	*53 - 125*	*07/25/19 08:36*	*08/02/19 00:08*	*1*
2,4,6-Tribromophenol	*50*		*15 - 135*	*07/25/19 08:36*	*08/02/19 00:08*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0056	ug/L		07/22/19 13:44	07/22/19 21:55	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/22/19 13:44	07/22/19 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*07/22/19 13:44*	*07/22/19 21:55*	*1*

Client Sample ID: P56-ROX-071219
Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**99**		25	10	ug/L			07/21/19 15:40	1
Acrolein	ND		20	10	ug/L			07/21/19 15:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/19 15:40	1
Benzene	**6.4**		1.0	0.38	ug/L			07/21/19 15:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/19 15:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/21/19 15:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Bromoform	ND		5.0	0.71	ug/L			07/21/19 15:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/19 15:40	1
2-Butanone (MEK)	**110**		25	2.6	ug/L			07/21/19 15:40	1
Carbon disulfide	**0.90**	**J**	1.0	0.50	ug/L			07/21/19 15:40	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/19 15:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/21/19 15:40	1
Chloroform	ND		1.0	0.60	ug/L			07/21/19 15:40	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/21/19 15:40	1
Chloromethane	ND		1.0	0.83	ug/L			07/21/19 15:40	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/19 15:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/19 15:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/19 15:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/19 15:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Ethylbenzene	**180**		1.0	0.50	ug/L			07/21/19 15:40	1
Ethyl methacrylate	**4.0**		1.0	0.60	ug/L			07/21/19 15:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/19 15:40	1
2-Hexanone	ND		25	3.1	ug/L			07/21/19 15:40	1
Isopropylbenzene	**29**		1.0	0.53	ug/L			07/21/19 15:40	1
Methylene bromide	ND		5.0	0.59	ug/L			07/21/19 15:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/19 15:40	1
4-Methyl-2-pentanone (MIBK)	**18**	**J**	25	1.8	ug/L			07/21/19 15:40	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/21/19 15:40	1
m-Xylene & p-Xylene	**210**		5.0	1.6	ug/L			07/21/19 15:40	1
Naphthalene	**27**		1.0	1.0	ug/L			07/21/19 15:40	1
n-Butylbenzene	**2.4**		1.0	0.76	ug/L			07/21/19 15:40	1
N-Propylbenzene	**39**		1.0	0.69	ug/L			07/21/19 15:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/19 15:40	1
o-Xylene	**6.4**		5.0	0.60	ug/L			07/21/19 15:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/19 15:40	1
p-Isopropyltoluene	**1.9**		1.0	0.71	ug/L			07/21/19 15:40	1

Client Sample ID: P56-ROX-071219
Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**2.6**		1.0	0.70	ug/L			07/21/19 15:40	1
Styrene	ND		1.0	1.0	ug/L			07/21/19 15:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/19 15:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/21/19 15:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/21/19 15:40	1
Toluene	**7.9**		1.0	0.41	ug/L			07/21/19 15:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/19 15:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/21/19 15:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/19 15:40	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/21/19 15:40	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/21/19 15:40	1
Trichloroethene	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/21/19 15:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/19 15:40	1
1,2,4-Trimethylbenzene	**83**		1.0	0.82	ug/L			07/21/19 15:40	1
1,3,5-Trimethylbenzene	**21**		1.0	0.56	ug/L			07/21/19 15:40	1
Vinyl acetate	ND		25	2.0	ug/L			07/21/19 15:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/19 15:40	1
Xylenes, Total	**220**		10	1.6	ug/L			07/21/19 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*07/21/19 15:40*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*07/21/19 15:40*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/21/19 15:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.58**	**J H** J	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
Acenaphthene	ND		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
Acenaphthylene	ND	H UJ	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
Acenaphthylene	ND		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
Anthracene	**0.21**	**J H** J	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
Anthracene	**0.22**	**J**	0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
Benzo[a]anthracene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Benzo[a]anthracene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Benzo[a]pyrene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Benzo[a]pyrene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Benzo[b]fluoranthene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Benzo[b]fluoranthene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Benzo[g,h,i]perylene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Benzo[g,h,i]perylene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Benzo[k]fluoranthene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Benzo[k]fluoranthene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Chrysene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Chrysene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Dibenz(a,h)anthracene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Dibenz(a,h)anthracene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Fluoranthene	ND	H UJ	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5

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

Job ID: 400-173131-1

Client Sample ID: P56-ROX-071219
Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
Fluorene	**0.61**	J H J	0.99	0.10	ug/L		07/25/19 08:36	08/02/19 20:18	5
Fluorene	**0.43**	J	0.97	0.10	ug/L		07/17/19 14:25	08/02/19 21:05	5
Indeno[1,2,3-cd]pyrene	ND	H UJ	0.99	0.20	ug/L		07/25/19 08:36	08/02/19 20:18	5
Indeno[1,2,3-cd]pyrene	ND		0.97	0.19	ug/L		07/17/19 14:25	08/02/19 21:05	5
Phenanthrene	**1.5**	H J	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
Phenanthrene	**1.8**		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
Pyrene	ND	H UJ	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
Pyrene	ND		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
1-Methylnaphthalene	**32**	H B J	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
1-Methylnaphthalene	**36**		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5
2-Methylnaphthalene	**25**	H B J	0.99	0.099	ug/L		07/25/19 08:36	08/02/19 20:18	5
2-Methylnaphthalene	**30**		0.97	0.097	ug/L		07/17/19 14:25	08/02/19 21:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*14*	*X*	*33 - 138*	*07/25/19 08:36*	*08/02/19 20:18*	*5*
Terphenyl-d14	*0.7*	*X*	*33 - 138*	*07/17/19 14:25*	*08/02/19 21:05*	*5*
2-Fluorobiphenyl	*65*		*15 - 122*	*07/25/19 08:36*	*08/02/19 20:18*	*5*
2-Fluorobiphenyl	*0*	*X*	*15 - 122*	*07/17/19 14:25*	*08/02/19 21:05*	*5*
Nitrobenzene-d5	*87*		*19 - 130*	*07/25/19 08:36*	*08/02/19 20:18*	*5*
Nitrobenzene-d5	*9*	*X*	*19 - 130*	*07/17/19 14:25*	*08/02/19 21:05*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/17/19 14:25	07/22/19 19:14	1
Benzenethiol	ND	*	9.7	1.6	ug/L		07/17/19 14:25	07/22/19 19:14	1
Benzoic acid	ND		29	7.1	ug/L		07/17/19 14:25	07/22/19 19:14	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 19:14	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/17/19 14:25	07/22/19 19:14	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		07/17/19 14:25	07/22/19 19:14	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		07/17/19 14:25	07/22/19 19:14	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/17/19 14:25	07/22/19 19:14	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/17/19 14:25	07/22/19 19:14	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/17/19 14:25	07/22/19 19:14	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/17/19 14:25	07/22/19 19:14	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/17/19 14:25	07/22/19 19:14	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		07/17/19 14:25	07/22/19 19:14	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/17/19 14:25	07/22/19 19:14	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 19:14	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		07/17/19 14:25	07/22/19 19:14	1
Dibenzofuran	ND		9.7	0.50	ug/L		07/17/19 14:25	07/22/19 19:14	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/17/19 14:25	07/22/19 19:14	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/17/19 14:25	07/22/19 19:14	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/17/19 14:25	07/22/19 19:14	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/17/19 14:25	07/22/19 19:14	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/17/19 14:25	07/22/19 19:14	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/17/19 14:25	07/22/19 19:14	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/17/19 14:25	07/22/19 19:14	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/17/19 14:25	07/22/19 19:14	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/17/19 14:25	07/22/19 19:14	1

Client Sample ID: P56-ROX-071219
Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/17/19 14:25	07/22/19 19:14	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		07/17/19 14:25	07/22/19 19:14	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/17/19 14:25	07/22/19 19:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/17/19 14:25	07/22/19 19:14	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/17/19 14:25	07/22/19 19:14	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/17/19 14:25	07/22/19 19:14	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/17/19 14:25	07/22/19 19:14	1
Indene	ND		9.7	0.97	ug/L		07/17/19 14:25	07/22/19 19:14	1
Isophorone	ND		9.7	0.55	ug/L		07/17/19 14:25	07/22/19 19:14	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/17/19 14:25	07/22/19 19:14	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/17/19 14:25	07/22/19 19:14	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/17/19 14:25	07/22/19 19:14	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/17/19 14:25	07/22/19 19:14	1
Nitrobenzene	ND		9.7	0.53	ug/L		07/17/19 14:25	07/22/19 19:14	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/17/19 14:25	07/22/19 19:14	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/17/19 14:25	07/22/19 19:14	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/17/19 14:25	07/22/19 19:14	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/17/19 14:25	07/22/19 19:14	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		07/17/19 14:25	07/22/19 19:14	1
Pentachlorophenol	ND		19	1.7	ug/L		07/17/19 14:25	07/22/19 19:14	1
Phenol	ND		9.7	2.5	ug/L		07/17/19 14:25	07/22/19 19:14	1
Pyridine	ND		9.7	3.1	ug/L		07/17/19 14:25	07/22/19 19:14	1
Quinoline	ND		9.7	5.8	ug/L		07/17/19 14:25	07/22/19 19:14	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/17/19 14:25	07/22/19 19:14	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/17/19 14:25	07/22/19 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*34 - 120*	*07/17/19 14:25*	*07/22/19 19:14*	*1*
2-Fluorophenol	*0.07*	*X*	*10 - 120*	*07/17/19 14:25*	*07/22/19 19:14*	*1*
Nitrobenzene-d5	*14*	*X*	*27 - 120*	*07/17/19 14:25*	*07/22/19 19:14*	*1*
Phenol-d5	*0*	*X*	*10 - 120*	*07/17/19 14:25*	*07/22/19 19:14*	*1*
Terphenyl-d14	*0.05*	*X*	*53 - 125*	*07/17/19 14:25*	*07/22/19 19:14*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*07/17/19 14:25*	*07/22/19 19:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	**940**		390	20	ug/L		07/17/19 14:25	07/26/19 16:26	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.7	ug/L		07/25/19 08:36	08/02/19 18:33	1
Benzenethiol	ND	H	9.9	1.7	ug/L		07/25/19 08:36	08/02/19 18:33	1
Benzoic acid	ND	H *	30	7.2	ug/L		07/25/19 08:36	08/02/19 18:33	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		07/25/19 08:36	08/02/19 18:33	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.68	ug/L		07/25/19 08:36	08/02/19 18:33	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.73	ug/L		07/25/19 08:36	08/02/19 18:33	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		07/25/19 08:36	08/02/19 18:33	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	4.9	ug/L		07/25/19 08:36	08/02/19 18:33	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		07/25/19 08:36	08/02/19 18:33	1

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

Job ID: 400-173131-1

Client Sample ID: P56-ROX-071219
Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H	9.9	0.68	ug/L		07/25/19 08:36	08/02/19 18:33	1
4-Chloroaniline	ND	H	9.9	3.3	ug/L		07/25/19 08:36	08/02/19 18:33	1
4-Chloro-3-methylphenol	ND	H	9.9	3.7	ug/L		07/25/19 08:36	08/02/19 18:33	1
2-Chloronaphthalene	ND	H	9.9	0.51	ug/L		07/25/19 08:36	08/02/19 18:33	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		07/25/19 08:36	08/02/19 18:33	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		07/25/19 08:36	08/02/19 18:33	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		07/25/19 08:36	08/02/19 18:33	1
Dibenzofuran	ND	H	9.9	0.51	ug/L		07/25/19 08:36	08/02/19 18:33	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		07/25/19 08:36	08/02/19 18:33	1
Diethyl phthalate	ND	H	9.9	0.69	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,4-Dimethylphenol	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 18:33	1
Dimethyl phthalate	ND	H	9.9	0.59	ug/L		07/25/19 08:36	08/02/19 18:33	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		07/25/19 08:36	08/02/19 18:33	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,4-Dinitrophenol	ND	H	30	3.3	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,4-Dinitrotoluene	ND	H *	9.9	1.9	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,6-Dinitrotoluene	ND	H *	9.9	1.9	ug/L		07/25/19 08:36	08/02/19 18:33	1
Di-n-octyl phthalate	**1.2**	**J H**	9.9	0.43	ug/L		07/25/19 08:36	08/02/19 18:33	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		07/25/19 08:36	08/02/19 18:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		07/25/19 08:36	08/02/19 18:33	1
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		07/25/19 08:36	08/02/19 18:33	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		07/25/19 08:36	08/02/19 18:33	1
Hexachloroethane	ND	H	9.9	4.1	ug/L		07/25/19 08:36	08/02/19 18:33	1
Indene	ND	H	9.9	0.99	ug/L		07/25/19 08:36	08/02/19 18:33	1
Isophorone	ND	H	9.9	0.56	ug/L		07/25/19 08:36	08/02/19 18:33	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		07/25/19 08:36	08/02/19 18:33	1
3 & 4 Methylphenol	**1800**	**H**	390	20	ug/L		07/25/19 08:36	08/02/19 18:55	20
2-Nitroaniline	ND	H	9.9	2.2	ug/L		07/25/19 08:36	08/02/19 18:33	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		07/25/19 08:36	08/02/19 18:33	1
4-Nitroaniline	ND	H	9.9	2.4	ug/L		07/25/19 08:36	08/02/19 18:33	1
Nitrobenzene	ND	H	9.9	0.54	ug/L		07/25/19 08:36	08/02/19 18:33	1
2-Nitrophenol	ND	H	9.9	0.64	ug/L		07/25/19 08:36	08/02/19 18:33	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		07/25/19 08:36	08/02/19 18:33	1
N-Nitrosodimethylamine	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 18:33	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		07/25/19 08:36	08/02/19 18:33	1
N-Nitrosodiphenylamine	ND	H	9.9	0.46	ug/L		07/25/19 08:36	08/02/19 18:33	1
Pentachlorophenol	ND	H	20	1.8	ug/L		07/25/19 08:36	08/02/19 18:33	1
Phenol	ND	H	9.9	2.6	ug/L		07/25/19 08:36	08/02/19 18:33	1
Pyridine	ND	H	9.9	3.2	ug/L		07/25/19 08:36	08/02/19 18:33	1
Quinoline	ND	H	9.9	5.9	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,4,5-Trichlorophenol	ND	H	9.9	3.6	ug/L		07/25/19 08:36	08/02/19 18:33	1
2,4,6-Trichlorophenol	ND	H	9.9	3.4	ug/L		07/25/19 08:36	08/02/19 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*07/25/19 08:36*	*08/02/19 18:33*	*1*
2-Fluorophenol	*49*		*10 - 120*	*07/25/19 08:36*	*08/02/19 18:33*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*07/25/19 08:36*	*08/02/19 18:33*	*1*
Phenol-d5	*130*	*X*	*10 - 120*	*07/25/19 08:36*	*08/02/19 18:33*	*1*

Client Sample ID: P56-ROX-071219
Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*12*	*X*	*53 - 125*	*07/25/19 08:36*	*08/02/19 18:33*	*1*
2,4,6-Tribromophenol	*70*		*15 - 135*	*07/25/19 08:36*	*08/02/19 18:33*	*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		0.029	0.0053	ug/L		07/22/19 13:44	07/22/19 22:18	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		07/22/19 13:44	07/22/19 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*478*	*X*	*51 - 149*	*07/22/19 13:44*	*07/22/19 22:18*	*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
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control 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
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: 400-173131-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (78-118)	DBFM (81-121)	TOL (80-120)
400-173131-2	TB-ROX-071219-8026-A	114	97	106
400-173131-3	ROST4PZG-ROX-071219	114	96	104
400-173131-4	MW10-ROX-071219	111	99	104
400-173131-5	MW5-ROX-071219	112	98	106
400-173131-6	ROST4PZE-ROX-071219	112	98	105
400-173131-7	ROST4PZC-ROX-071219	110	95	104
400-173131-8	TB-ROX-071219-8260-B	116	96	103
400-173131-10	P74-ROX-071219-EB	110	98	101
400-173131-11	P74-ROX-071219-	111	94	108
400-173131-11 MS	P74-ROX-071219-	107	97	101
400-173131-11 MSD	P74-ROX-071219-	111	95	99
400-173131-12	P93C-ROX-071219	117	95	107
400-173131-13	P93D-ROX-071219	113	96	106
400-173131-14	P93B-ROX-071219	110	90	105
400-173131-14 - DL	P93B-ROX-071219	110	96	103
400-173131-15	P93B-ROX-071219-DUP	112	89	108
400-173131-15 - DL	P93B-ROX-071219-DUP	109	96	101
400-173131-16	P56-ROX-071219	113	97	98
LCS 400-448795/1002	Lab Control Sample	112	95	98
LCS 400-448870/1002	Lab Control Sample	110	97	94
MB 400-448795/4	Method Blank	115	95	106
MB 400-448870/4	Method Blank	111	98	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (34-120)	2FP (10-120)	NBZ (27-120)	PHL (10-120)	TPHL (53-125)	TBP (15-135)
400-173131-3	ROST4PZG-ROX-071219	69	38	58	46	63	125
400-173131-4	MW10-ROX-071219	0 X	0 X	0 X	0 X	0 X	0 X
400-173131-4 - RERA	MW10-ROX-071219	50	47	89	68	64	39
400-173131-5	MW5-ROX-071219	0 X	0 X	0 X	0 X	0 X	0 X
400-173131-5 - RERA	MW5-ROX-071219	106	75	88	81	70	105
400-173131-6	ROST4PZE-ROX-071219	0 X	0 X	0 X	2 X	0 X	0 X
400-173131-6 - RERA	ROST4PZE-ROX-071219	93	63	84	78	79	104
400-173131-7	ROST4PZC-ROX-071219	0 X	0 X	0 X	0 X	0 X	0 X
400-173131-7 - RERA	ROST4PZC-ROX-071219	47	81	81	71	45 X	46
400-173131-10	P74-ROX-071219-EB	0 X	0 X	0 X	0 X	0 X *	0 X
400-173131-10 - RERA	P74-ROX-071219-EB	48	54	86	74	70	37
400-173131-11	P74-ROX-071219-	0 X	0 X	0.3 X	0.09 X	0 X	0 X
400-173131-11 - RERA	P74-ROX-071219-	45	24	88	48	62	53
400-173131-12	P93C-ROX-071219	0 X	0 X	0.05 X	0.09 X	0 X	0 X
400-173131-12 - RERA	P93C-ROX-071219	49	42	83	47	52 X	50
400-173131-13	P93D-ROX-071219	53	42	73	56	54	62

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)
400-173131-14	P93B-ROX-071219	0 X	0 X	2 X	0.3 X	0.3 X	0 X
400-173131-14 - RERA	P93B-ROX-071219	52	38	90	75	52 X	60
400-173131-15	P93B-ROX-071219-DUP	0 X	4 X	2 X	0 X	0 X	0 X
400-173131-15 - RERA	P93B-ROX-071219-DUP	48	44	85	71	42 X	50
400-173131-16	P56-ROX-071219	0 X	0.07 X	14 X	0 X	0.05 X	0 X
400-173131-16 - RERA	P56-ROX-071219	57	49	72	130 X	12 X	70
LCS 400-448434/22-A	Lab Control Sample	67	44	56	47	80	79
LCS 400-448434/2-A	Lab Control Sample	76	39	59	51	89	123
LCS 400-448615/2-A	Lab Control Sample	69	37	52	46	77	106
LCS 400-448615/4-A	Lab Control Sample	44	41	62	44	55	47
LCS 400-449437/2-A	Lab Control Sample	100	74	100	95	115	112
LCS 400-449437/4-A	Lab Control Sample	45	40	79	60	66	25
LCS 400-449448/20-A	Lab Control Sample	54	45	80	67	69	67
LCSD 400-448434/23-A	Lab Control Sample Dup	58	38	58	52	77	84
LCSD 400-448434/3-A	Lab Control Sample Dup	72	37	65	50	84	105
LCSD 400-448615/3-A	Lab Control Sample Dup	57	35	46	39	62	90
LCSD 400-448615/5-A	Lab Control Sample Dup	46	41	66	53	58	51
LCSD 400-449437/3-A	Lab Control Sample Dup	100	79	99	92	107	107
LCSD 400-449437/5-A	Lab Control Sample Dup	44	45	81	67	67	34
LCSD 400-449448/21-A	Lab Control Sample Dup	60	48	81	70	77	71
MB 400-448434/1-A	Method Blank	68	42	61	52	63	90
MB 400-448615/1-A	Method Blank	69	35	52	45	73	83
MB 400-449437/1-A	Method Blank	45	53	82	70	70	35
MB 400-449448/1-A	Method Blank	63	35	54	44	84	81

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)
400-173131-3	ROST4PZG-ROX-071219	48	51	53
400-173131-4	MW10-ROX-071219	0 X	0 X	0 X
400-173131-4 - RE	MW10-ROX-071219	124	97	105
400-173131-5	MW5-ROX-071219	0 X	0 X	0 X
400-173131-5 - RE	MW5-ROX-071219	79	91	84
400-173131-6	ROST4PZE-ROX-071219	0 X	0 X	0 X
400-173131-6	ROST4PZE-ROX-071219	78	71	94
400-173131-7	ROST4PZC-ROX-071219	73	80	61
400-173131-7	ROST4PZC-ROX-071219	0 X	0 X	0 X
400-173131-10	P74-ROX-071219-EB	0 X *	0 X	0 X
400-173131-10	P74-ROX-071219-EB	120	93	86
400-173131-11	P74-ROX-071219-	0 X	0 X	0 X

Surrogate Summary

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

Job ID: 400-173131-1

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

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)
400-173131-11	P74-ROX-071219-	90	77	87
400-173131-12	P93C-ROX-071219	0 X	0 X	0 X
400-173131-12	P93C-ROX-071219	81	83	84
400-173131-13	P93D-ROX-071219	100	90	91
400-173131-14	P93B-ROX-071219	0 X	0 X	0 X
400-173131-14	P93B-ROX-071219			80
400-173131-14	P93B-ROX-071219	47	51	
400-173131-15	P93B-ROX-071219-DUP	0 X *	0 X	0 X
400-173131-15	P93B-ROX-071219-DUP	76	84	72
400-173131-16	P56-ROX-071219	14 X	65	87
400-173131-16	P56-ROX-071219	0.7 X	0 X	9 X
LCS 400-448434/2-A	Lab Control Sample	104	73	75
LCS 400-448615/2-A	Lab Control Sample	93	69	74
LCS 400-449437/2-A	Lab Control Sample	93	84	83
LCS 400-449448/20-A	Lab Control Sample	93	75	73
LCSD 400-448434/3-A	Lab Control Sample Dup	86	77	75
LCSD 400-448615/3-A	Lab Control Sample Dup	84	65	57
LCSD 400-449437/3-A	Lab Control Sample Dup	84	83	86
LCSD 400-449448/21-A	Lab Control Sample Dup	94	82	87
MB 400-448434/1-A	Method Blank	120	108	102
MB 400-448615/1-A	Method Blank	230 X	146 X	115
MB 400-449437/1-A	Method Blank	111	73	95
MB 400-449448/1-A	Method Blank	111	86	85

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)
400-173131-1	TB-ROX-071219-8011-A	101
400-173131-3	ROST4PZG-ROX-071219	100
400-173131-4	MW10-ROX-071219	95
400-173131-5	MW5-ROX-071219	120
400-173131-6	ROST4PZE-ROX-071219	100
400-173131-7	ROST4PZC-ROX-071219	106
400-173131-9	TB-ROX-071219-8011-B	102
400-173131-10	P74-ROX-071219-EB	98
400-173131-11	P74-ROX-071219-	101
400-173131-12	P93C-ROX-071219	103
400-173131-13	P93D-ROX-071219	115
400-173131-14	P93B-ROX-071219	101
400-173131-15	P93B-ROX-071219-DUP	90
400-173131-16	P56-ROX-071219	478 X
LCS 400-448993/2-A	Lab Control Sample	86
LCS 400-449012/2-A	Lab Control Sample	93

Surrogate Summary

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

Job ID: 400-173131-1

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)
LCSD 400-449012/3-A	Lab Control Sample Dup	103
MB 400-448993/1-A	Method Blank	90
MB 400-449012/1-A	Method Blank	107

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-173131-1

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: 400-173131-1

Client Sample ID: TB-ROX-071219-8011-A

Lab Sample ID: 400-173131-1

Date Collected: 07/12/19 08:00
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.1 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 02:48	DS	TAL PEN

Client Sample ID: TB-ROX-071219-8026-A

Lab Sample ID: 400-173131-2

Date Collected: 07/12/19 08:00
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 13:54	RS	TAL PEN

Client Sample ID: ROST4PZG-ROX-071219

Lab Sample ID: 400-173131-3

Date Collected: 07/12/19 08:50
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 15:13	RS	TAL PEN
Total/NA	Prep	3520C			1039.6 mL	1 mL	448434	07/17/19 23:24	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448987	07/22/19 21:44	VC1	TAL PEN
Total/NA	Prep	3520C			1039.6 mL	1 mL	448434	07/17/19 23:24	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450940	08/05/19 15:29	KJA	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 03:11	DS	TAL PEN

Client Sample ID: MW10-ROX-071219

Lab Sample ID: 400-173131-4

Date Collected: 07/12/19 09:40
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 15:39	RS	TAL PEN
Total/NA	Prep	3520C			986 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 20:59	S1S	TAL PEN
Total/NA	Prep	3520C	RERA		1003.8 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450063	07/31/19 01:34	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1003.8 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450467	08/01/19 20:57	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1003.8 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D LL	RE	1			450489	08/01/19 16:18	KJA	TAL PEN
Total/NA	Prep	3520C			986 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 13:32	KJA	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 03:33	DS	TAL PEN

Client Sample ID: MW5-ROX-071219

Date Collected: 07/12/19 10:30
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-5
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	448795	07/20/19 16:05	RS	TAL PEN
Total/NA	Prep	3520C			1034.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 21:20	S1S	TAL PEN
Total/NA	Prep	3520C	RERA		1041.6 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450762	08/03/19 13:13	VC1	TAL PEN
Total/NA	Prep	3520C	RE		1041.6 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D LL	RE	1			450489	08/01/19 16:35	KJA	TAL PEN
Total/NA	Prep	3520C			1034.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 13:50	KJA	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 04:18	DS	TAL PEN

Client Sample ID: ROST4PZE-ROX-071219

Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 16:32	RS	TAL PEN
Total/NA	Prep	3520C			1016.8 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		5			448799	07/20/19 21:41	S1S	TAL PEN
Total/NA	Prep	3520C	RERA		1021.8 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450762	08/03/19 13:38	VC1	TAL PEN
Total/NA	Prep	3520C			1016.8 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		10			450159	07/31/19 14:08	KJA	TAL PEN
Total/NA	Prep	3520C			1021.8 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			450731	08/02/19 23:15	KJA	TAL PEN
Total/NA	Prep	8011			32.2 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 04:40	DS	TAL PEN

Client Sample ID: ROST4PZC-ROX-071219

Date Collected: 07/12/19 12:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 16:58	RS	TAL PEN
Total/NA	Prep	3520C			1038.6 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 22:03	S1S	TAL PEN
Total/NA	Prep	3520C	RERA		1032.2 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450063	07/31/19 02:37	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1032.2 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450467	08/01/19 22:01	VC1	TAL PEN
Total/NA	Prep	3520C			1038.6 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		10			450159	07/31/19 14:26	KJA	TAL PEN
Total/NA	Prep	3520C			1032.2 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			450731	08/02/19 22:10	KJA	TAL PEN

Client Sample ID: ROST4PZC-ROX-071219

Lab Sample ID: 400-173131-7

Date Collected: 07/12/19 12:10
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1038.6 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		10			450940	08/05/19 14:18	KJA	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 05:03	DS	TAL PEN

Client Sample ID: TB-ROX-071219-8260-B

Lab Sample ID: 400-173131-8

Date Collected: 07/12/19 00:00
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 14:20	RS	TAL PEN

Client Sample ID: TB-ROX-071219-8011-B

Lab Sample ID: 400-173131-9

Date Collected: 07/12/19 00:00
Matrix: Water
Date Received: 07/13/19 09:04

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	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 05:25	DS	TAL PEN

Client Sample ID: P74-ROX-071219-EB

Lab Sample ID: 400-173131-10

Date Collected: 07/12/19 08:55
Matrix: Water
Date Received: 07/13/19 09:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448870	07/21/19 14:20	RS	TAL PEN
Total/NA	Prep	3520C			1040 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 22:24	S1S	TAL PEN
Total/NA	Prep	3520C	RERA		1012.6 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450063	07/31/19 02:58	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1012.6 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450467	08/01/19 22:22	VC1	TAL PEN
Total/NA	Prep	3520C			1012.6 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			450489	08/01/19 17:09	KJA	TAL PEN
Total/NA	Prep	3520C			1040 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 14:43	KJA	TAL PEN
Total/NA	Prep	3520C			1012.6 mL	1 mL	449437	07/24/19 22:20	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			450731	08/02/19 22:26	KJA	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 06:55	DS	TAL PEN

Client Sample ID: P74-ROX-071219-

Date Collected: 07/12/19 09:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 11:15	RS	TAL PEN
Total/NA	Prep	3520C			1039.6 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 21:17	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1009.2 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450203	07/31/19 22:09	VC1	TAL PEN
Total/NA	Prep	3520C			1039.6 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 15:00	KJA	TAL PEN
Total/NA	Prep	3520C			1009.2 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			450731	08/02/19 19:12	KJA	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 07:17	DS	TAL PEN

Client Sample ID: P93C-ROX-071219

Date Collected: 07/12/19 10:10
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 11:41	RS	TAL PEN
Total/NA	Prep	3520C			1037.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 21:38	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1004.4 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450203	07/31/19 22:31	VC1	TAL PEN
Total/NA	Prep	3520C			1037.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 15:19	KJA	TAL PEN
Total/NA	Prep	3520C			1004.4 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			450731	08/02/19 19:28	KJA	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 07:40	DS	TAL PEN

Client Sample ID: P93D-ROX-071219

Date Collected: 07/12/19 10:55
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 12:08	RS	TAL PEN
Total/NA	Prep	3520C			1021.2 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 20:56	VC1	TAL PEN
Total/NA	Prep	3520C			1021.2 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449815	07/28/19 19:46	KJA	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 21:10	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-173131-1

Client Sample ID: P93B-ROX-071219

Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	448795	07/20/19 19:10	RS	TAL PEN
Total/NA	Analysis	8260B	DL	1000	5 mL	5 mL	448870	07/21/19 17:54	RS	TAL PEN
Total/NA	Prep	3520C	RERA		1024.6 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	10			450683	08/02/19 21:03	VC1	TAL PEN
Total/NA	Prep	3520C			1026.4 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448987	07/22/19 18:31	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1024.6 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450467	08/01/19 23:47	VC1	TAL PEN
Total/NA	Prep	3520C			1026.4 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 15:38	KJA	TAL PEN
Total/NA	Prep	3520C			1024.6 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			450731	08/02/19 19:45	KJA	TAL PEN
Total/NA	Prep	3520C			1024.6 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			450940	08/05/19 14:39	KJA	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 21:33	DS	TAL PEN

Client Sample ID: P93B-ROX-071219-DUP

Date Collected: 07/12/19 11:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	448795	07/20/19 19:37	RS	TAL PEN
Total/NA	Analysis	8260B	DL	1000	5 mL	5 mL	448870	07/21/19 18:21	RS	TAL PEN
Total/NA	Prep	3520C	RERA		1014.8 mL	1 mL	449448	07/25/19 08:36	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	10			450683	08/02/19 21:27	VC1	TAL PEN
Total/NA	Prep	3520C			1024.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448987	07/22/19 18:52	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1024.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D	DL	5			449178	07/23/19 23:08	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1014.8 mL	1 mL	449448	07/25/19 08:36	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			450467	08/02/19 00:08	VC1	TAL PEN
Total/NA	Prep	3520C			1024.2 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 15:57	KJA	TAL PEN
Total/NA	Prep	3520C			1014.8 mL	1 mL	449448	07/25/19 08:36	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			450731	08/02/19 20:01	KJA	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 21:55	DS	TAL PEN

Client Sample ID: P56-ROX-071219

Date Collected: 07/12/19 13:15
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448870	07/21/19 15:40	RS	TAL PEN
Total/NA	Prep	3520C	DL		1034.4 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D	DL	20			449647	07/26/19 16:26	VC1	TAL PEN
Total/NA	Prep	3520C			1034.4 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448987	07/22/19 19:14	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1015 mL	1 mL	449448	07/25/19 08:36	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1	0.4 mL	1.0 mL	450569	08/02/19 18:33	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1015 mL	1 mL	449448	07/25/19 08:36	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	20			450569	08/02/19 18:55	VC1	TAL PEN
Total/NA	Prep	3520C			1015 mL	1 mL	449448	07/25/19 08:36	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			450731	08/02/19 20:18	KJA	TAL PEN
Total/NA	Prep	3520C			1034.4 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			450731	08/02/19 21:05	KJA	TAL PEN
Total/NA	Prep	8011			36.3 mL	35 mL	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 22:18	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448434/1-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	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 19:11	S1S	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			450159	07/31/19 12:39	KJA	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448615/1-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 01:33	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449114	07/23/19 16:26	KJA	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448795/4
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	448795	07/20/19 10:49	RS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448870/4
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	448870	07/21/19 10:21	RS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-448993/1-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	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 20:02	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-449012/1-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	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 05:48	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-449437/1-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	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D		1			450063	07/30/19 21:00	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D		1			450467	08/01/19 20:36	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			450489	08/01/19 15:26	KJA	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-449448/1-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	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450054	07/30/19 22:58	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450467	08/02/19 00:51	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449448	07/25/19 08:28	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			450731	08/02/19 18:25	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448434/22-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	448434	07/17/19 14:52	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 19:33	S1S	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448434/2-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	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 20:16	S1S	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			450159	07/31/19 12:56	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448615/2-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 01:54	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			449114	07/23/19 16:42	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448615/4-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 15:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448795/1002**
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	448795	07/20/19 09:47	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448870/1002**
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	448870	07/21/19 09:20	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448993/2-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	448993	07/22/19 13:44	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/22/19 20:24	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-449012/2-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	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 06:10	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-449437/2-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	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D		1			450762	08/03/19 10:44	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			450489	08/01/19 15:44	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-449437/4-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	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D		1			450063	07/30/19 22:04	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-449448/20-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	449448	07/25/19 16:17	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450203	07/31/19 20:45	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449448	07/25/19 16:17	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			450731	08/02/19 18:41	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-448434/23-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	448434	07/17/19 14:52	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 19:54	S1S	TAL PEN

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

Lab Sample ID: LCSD 400-448434/3-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	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D		1			448799	07/20/19 20:37	S1S	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448434	07/17/19 14:25	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			450159	07/31/19 13:15	KJA	TAL PEN

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

Lab Sample ID: LCSD 400-448615/3-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 02:16	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			449114	07/23/19 17:00	KJA	TAL PEN

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

Lab Sample ID: LCSD 400-448615/5-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 15:38	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-449012/3-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	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 06:32	DS	TAL PEN

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

Lab Sample ID: LCSD 400-449437/3-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	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D		1			450762	08/03/19 11:08	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			450489	08/01/19 16:01	KJA	TAL PEN

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

Lab Sample ID: LCSD 400-449437/5-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	449437	07/24/19 21:29	CGM	TAL PEN
Total/NA	Analysis	8270D		1			450063	07/30/19 22:25	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-449448/21-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	449448	07/25/19 16:18	NTH	TAL PEN
Total/NA	Analysis	8270D		1			450203	07/31/19 21:06	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	449448	07/25/19 16:18	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			450731	08/02/19 18:56	KJA	TAL PEN

Client Sample ID: P74-ROX-071219-
Date Collected: 07/12/19 09:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-11 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	448795	07/20/19 12:34	RS	TAL PEN

Client Sample ID: P74-ROX-071219-
Date Collected: 07/12/19 09:20
Date Received: 07/13/19 09:04

Lab Sample ID: 400-173131-11 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448795	07/20/19 13:01	RS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 448795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-2	TB-ROX-071219-8026-A	Total/NA	Water	8260B	
400-173131-3	ROST4PZG-ROX-071219	Total/NA	Water	8260B	
400-173131-4	MW10-ROX-071219	Total/NA	Water	8260B	
400-173131-5	MW5-ROX-071219	Total/NA	Water	8260B	
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	8260B	
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8260B	
400-173131-8	TB-ROX-071219-8260-B	Total/NA	Water	8260B	
400-173131-11	P74-ROX-071219-	Total/NA	Water	8260B	
400-173131-12	P93C-ROX-071219	Total/NA	Water	8260B	
400-173131-13	P93D-ROX-071219	Total/NA	Water	8260B	
400-173131-14	P93B-ROX-071219	Total/NA	Water	8260B	
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	8260B	
MB 400-448795/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448795/1002	Lab Control Sample	Total/NA	Water	8260B	
400-173131-11 MS	P74-ROX-071219-	Total/NA	Water	8260B	
400-173131-11 MSD	P74-ROX-071219-	Total/NA	Water	8260B	

Analysis Batch: 448870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8260B	
400-173131-14 - DL	P93B-ROX-071219	Total/NA	Water	8260B	
400-173131-15 - DL	P93B-ROX-071219-DUP	Total/NA	Water	8260B	
400-173131-16	P56-ROX-071219	Total/NA	Water	8260B	
MB 400-448870/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448870/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 448434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-3	ROST4PZG-ROX-071219	Total/NA	Water	3520C	
400-173131-4	MW10-ROX-071219	Total/NA	Water	3520C	
400-173131-5	MW5-ROX-071219	Total/NA	Water	3520C	
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	3520C	
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	3520C	
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	3520C	
400-173131-11	P74-ROX-071219-	Total/NA	Water	3520C	
400-173131-12	P93C-ROX-071219	Total/NA	Water	3520C	
400-173131-14	P93B-ROX-071219	Total/NA	Water	3520C	
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	3520C	
400-173131-15 - DL	P93B-ROX-071219-DUP	Total/NA	Water	3520C	
400-173131-16 - DL	P56-ROX-071219	Total/NA	Water	3520C	
400-173131-16	P56-ROX-071219	Total/NA	Water	3520C	
MB 400-448434/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-448434/22-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-448434/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-448434/23-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-448434/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

GC/MS Semi VOA

Prep Batch: 448615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-13	P93D-ROX-071219	Total/NA	Water	3520C	
MB 400-448615/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-448615/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-448615/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-448615/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-448615/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 448799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-4	MW10-ROX-071219	Total/NA	Water	8270D	448434
400-173131-5	MW5-ROX-071219	Total/NA	Water	8270D	448434
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	8270D	448434
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8270D	448434
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8270D	448434
MB 400-448434/1-A	Method Blank	Total/NA	Water	8270D	448434
LCS 400-448434/22-A	Lab Control Sample	Total/NA	Water	8270D	448434
LCS 400-448434/2-A	Lab Control Sample	Total/NA	Water	8270D	448434
LCSD 400-448434/23-A	Lab Control Sample Dup	Total/NA	Water	8270D	448434
LCSD 400-448434/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	448434

Analysis Batch: 448802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-11	P74-ROX-071219-	Total/NA	Water	8270D	448434
400-173131-12	P93C-ROX-071219	Total/NA	Water	8270D	448434
400-173131-13	P93D-ROX-071219	Total/NA	Water	8270D	448615
LCS 400-448615/4-A	Lab Control Sample	Total/NA	Water	8270D	448615
LCSD 400-448615/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	448615

Analysis Batch: 448987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-3	ROST4PZG-ROX-071219	Total/NA	Water	8270D	448434
400-173131-14	P93B-ROX-071219	Total/NA	Water	8270D	448434
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	8270D	448434
400-173131-16	P56-ROX-071219	Total/NA	Water	8270D	448434

Analysis Batch: 449114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-448615/1-A	Method Blank	Total/NA	Water	8270D LL	448615
LCS 400-448615/2-A	Lab Control Sample	Total/NA	Water	8270D LL	448615
LCSD 400-448615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	448615

Analysis Batch: 449178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-15 - DL	P93B-ROX-071219-DUP	Total/NA	Water	8270D	448434

Analysis Batch: 449209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-448615/1-A	Method Blank	Total/NA	Water	8270D	448615
LCS 400-448615/2-A	Lab Control Sample	Total/NA	Water	8270D	448615
LCSD 400-448615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	448615

GC/MS Semi VOA

Prep Batch: 449437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-4 - RE	MW10-ROX-071219	Total/NA	Water	3520C	
400-173131-4 - RERA	MW10-ROX-071219	Total/NA	Water	3520C	
400-173131-5 - RE	MW5-ROX-071219	Total/NA	Water	3520C	
400-173131-5 - RERA	MW5-ROX-071219	Total/NA	Water	3520C	
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	3520C	
400-173131-6 - RERA	ROST4PZE-ROX-071219	Total/NA	Water	3520C	
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	3520C	
400-173131-7 - RERA	ROST4PZC-ROX-071219	Total/NA	Water	3520C	
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	3520C	
400-173131-10 - RERA	P74-ROX-071219-EB	Total/NA	Water	3520C	
MB 400-449437/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-449437/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-449437/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-449437/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-449437/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 449448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-11	P74-ROX-071219-	Total/NA	Water	3520C	
400-173131-11 - RERA	P74-ROX-071219-	Total/NA	Water	3520C	
400-173131-12	P93C-ROX-071219	Total/NA	Water	3520C	
400-173131-12 - RERA	P93C-ROX-071219	Total/NA	Water	3520C	
400-173131-14 - RERA	P93B-ROX-071219	Total/NA	Water	3520C	
400-173131-14	P93B-ROX-071219	Total/NA	Water	3520C	
400-173131-15 - RERA	P93B-ROX-071219-DUP	Total/NA	Water	3520C	
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	3520C	
400-173131-16	P56-ROX-071219	Total/NA	Water	3520C	
400-173131-16 - RERA	P56-ROX-071219	Total/NA	Water	3520C	
MB 400-449448/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-449448/20-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-449448/21-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 449647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-16 - DL	P56-ROX-071219	Total/NA	Water	8270D	448434

Analysis Batch: 449815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-13	P93D-ROX-071219	Total/NA	Water	8270D LL	448615

Analysis Batch: 450054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-449448/1-A	Method Blank	Total/NA	Water	8270D	449448

Analysis Batch: 450063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-4 - RERA	MW10-ROX-071219	Total/NA	Water	8270D	449437
400-173131-7 - RERA	ROST4PZC-ROX-071219	Total/NA	Water	8270D	449437
400-173131-10 - RERA	P74-ROX-071219-EB	Total/NA	Water	8270D	449437
MB 400-449437/1-A	Method Blank	Total/NA	Water	8270D	449437
LCS 400-449437/4-A	Lab Control Sample	Total/NA	Water	8270D	449437

GC/MS Semi VOA (Continued)

Analysis Batch: 450063 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-449437/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	449437

Analysis Batch: 450159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-4	MW10-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-5	MW5-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8270D LL	448434
400-173131-11	P74-ROX-071219-	Total/NA	Water	8270D LL	448434
400-173131-12	P93C-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-14	P93B-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	8270D LL	448434
MB 400-448434/1-A	Method Blank	Total/NA	Water	8270D LL	448434
LCS 400-448434/2-A	Lab Control Sample	Total/NA	Water	8270D LL	448434
LCSD 400-448434/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	448434

Analysis Batch: 450203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-11 - RERA	P74-ROX-071219-	Total/NA	Water	8270D	449448
400-173131-12 - RERA	P93C-ROX-071219	Total/NA	Water	8270D	449448
LCS 400-449448/20-A	Lab Control Sample	Total/NA	Water	8270D	449448
LCSD 400-449448/21-A	Lab Control Sample Dup	Total/NA	Water	8270D	449448

Analysis Batch: 450467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-4 - RERA	MW10-ROX-071219	Total/NA	Water	8270D	449437
400-173131-7 - RERA	ROST4PZC-ROX-071219	Total/NA	Water	8270D	449437
400-173131-10 - RERA	P74-ROX-071219-EB	Total/NA	Water	8270D	449437
400-173131-14 - RERA	P93B-ROX-071219	Total/NA	Water	8270D	449448
400-173131-15 - RERA	P93B-ROX-071219-DUP	Total/NA	Water	8270D	449448
MB 400-449437/1-A	Method Blank	Total/NA	Water	8270D	449437
MB 400-449448/1-A	Method Blank	Total/NA	Water	8270D	449448

Analysis Batch: 450489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-4 - RE	MW10-ROX-071219	Total/NA	Water	8270D LL	449437
400-173131-5 - RE	MW5-ROX-071219	Total/NA	Water	8270D LL	449437
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8270D LL	449437
MB 400-449437/1-A	Method Blank	Total/NA	Water	8270D LL	449437
LCS 400-449437/2-A	Lab Control Sample	Total/NA	Water	8270D LL	449437
LCSD 400-449437/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	449437

Analysis Batch: 450569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-16 - RERA	P56-ROX-071219	Total/NA	Water	8270D	449448
400-173131-16 - RERA	P56-ROX-071219	Total/NA	Water	8270D	449448

Analysis Batch: 450683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-14 - RERA	P93B-ROX-071219	Total/NA	Water	8270D	449448

GC/MS Semi VOA (Continued)

Analysis Batch: 450683 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-15 - RERA	P93B-ROX-071219-DUP	Total/NA	Water	8270D	449448

Analysis Batch: 450731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	8270D LL	449437
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8270D LL	449437
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8270D LL	449437
400-173131-11	P74-ROX-071219-	Total/NA	Water	8270D LL	449448
400-173131-12	P93C-ROX-071219	Total/NA	Water	8270D LL	449448
400-173131-14	P93B-ROX-071219	Total/NA	Water	8270D LL	449448
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	8270D LL	449448
400-173131-16	P56-ROX-071219	Total/NA	Water	8270D LL	449448
400-173131-16	P56-ROX-071219	Total/NA	Water	8270D LL	448434
MB 400-449448/1-A	Method Blank	Total/NA	Water	8270D LL	449448
LCS 400-449448/20-A	Lab Control Sample	Total/NA	Water	8270D LL	449448
LCSD 400-449448/21-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	449448

Analysis Batch: 450762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-5 - RERA	MW5-ROX-071219	Total/NA	Water	8270D	449437
400-173131-6 - RERA	ROST4PZE-ROX-071219	Total/NA	Water	8270D	449437
LCS 400-449437/2-A	Lab Control Sample	Total/NA	Water	8270D	449437
LCSD 400-449437/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	449437

Analysis Batch: 450940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-3	ROST4PZG-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8270D LL	448434
400-173131-14	P93B-ROX-071219	Total/NA	Water	8270D LL	449448

GC Semi VOA

Prep Batch: 448993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-1	TB-ROX-071219-8011-A	Total/NA	Water	8011	
400-173131-3	ROST4PZG-ROX-071219	Total/NA	Water	8011	
400-173131-4	MW10-ROX-071219	Total/NA	Water	8011	
400-173131-5	MW5-ROX-071219	Total/NA	Water	8011	
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	8011	
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8011	
400-173131-9	TB-ROX-071219-8011-B	Total/NA	Water	8011	
400-173131-13	P93D-ROX-071219	Total/NA	Water	8011	
400-173131-14	P93B-ROX-071219	Total/NA	Water	8011	
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	8011	
400-173131-16	P56-ROX-071219	Total/NA	Water	8011	
MB 400-448993/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-448993/2-A	Lab Control Sample	Total/NA	Water	8011	

Prep Batch: 449012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 449012 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-11	P74-ROX-071219-	Total/NA	Water	8011	
400-173131-12	P93C-ROX-071219	Total/NA	Water	8011	
MB 400-449012/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-449012/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-449012/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 449076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173131-1	TB-ROX-071219-8011-A	Total/NA	Water	8011	448993
400-173131-3	ROST4PZG-ROX-071219	Total/NA	Water	8011	448993
400-173131-4	MW10-ROX-071219	Total/NA	Water	8011	448993
400-173131-5	MW5-ROX-071219	Total/NA	Water	8011	448993
400-173131-6	ROST4PZE-ROX-071219	Total/NA	Water	8011	448993
400-173131-7	ROST4PZC-ROX-071219	Total/NA	Water	8011	448993
400-173131-9	TB-ROX-071219-8011-B	Total/NA	Water	8011	448993
400-173131-10	P74-ROX-071219-EB	Total/NA	Water	8011	449012
400-173131-11	P74-ROX-071219-	Total/NA	Water	8011	449012
400-173131-12	P93C-ROX-071219	Total/NA	Water	8011	449012
400-173131-13	P93D-ROX-071219	Total/NA	Water	8011	448993
400-173131-14	P93B-ROX-071219	Total/NA	Water	8011	448993
400-173131-15	P93B-ROX-071219-DUP	Total/NA	Water	8011	448993
400-173131-16	P56-ROX-071219	Total/NA	Water	8011	448993
MB 400-448993/1-A	Method Blank	Total/NA	Water	8011	448993
MB 400-449012/1-A	Method Blank	Total/NA	Water	8011	449012
LCS 400-448993/2-A	Lab Control Sample	Total/NA	Water	8011	448993
LCS 400-449012/2-A	Lab Control Sample	Total/NA	Water	8011	449012
LCSD 400-449012/3-A	Lab Control Sample Dup	Total/NA	Water	8011	449012

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

Lab Sample ID: MB 400-448795/4
Matrix: Water
Analysis Batch: 448795

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/20/19 10:49	1
Acrolein	ND		20	10	ug/L			07/20/19 10:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/19 10:49	1
Benzene	ND		1.0	0.38	ug/L			07/20/19 10:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/19 10:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/19 10:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Bromoform	ND		5.0	0.71	ug/L			07/20/19 10:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/19 10:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/19 10:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/19 10:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/19 10:49	1
Chloroform	ND		1.0	0.60	ug/L			07/20/19 10:49	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/19 10:49	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/19 10:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 10:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/19 10:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/19 10:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/19 10:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/19 10:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/19 10:49	1
2-Hexanone	ND		25	3.1	ug/L			07/20/19 10:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/19 10:49	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/19 10:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/19 10:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/19 10:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/19 10:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/19 10:49	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/19 10:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/19 10:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/19 10:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/19 10:49	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/19 10:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/19 10:49	1

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

Lab Sample ID: MB 400-448795/4
Matrix: Water
Analysis Batch: 448795

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/19 10:49	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/19 10:49	1
Styrene	ND		1.0	1.0	ug/L			07/20/19 10:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/19 10:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/19 10:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/19 10:49	1
Toluene	ND		1.0	0.41	ug/L			07/20/19 10:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/19 10:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/19 10:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/19 10:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/19 10:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/19 10:49	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/19 10:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/19 10:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/19 10:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/19 10:49	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/19 10:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/19 10:49	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/19 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/20/19 10:49*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*07/20/19 10:49*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 10:49*	*1*

Lab Sample ID: LCS 400-448795/1002
Matrix: Water
Analysis Batch: 448795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	219		ug/L		109	43 - 160
Acrolein	500	609		ug/L		122	38 - 160
Acrylonitrile	500	489		ug/L		98	64 - 142
Benzene	50.0	50.4		ug/L		101	70 - 130
Bromobenzene	50.0	50.8		ug/L		102	70 - 132
Bromochloromethane	50.0	44.1		ug/L		88	70 - 130
Bromodichloromethane	50.0	44.3		ug/L		89	67 - 133
Bromoform	50.0	47.1		ug/L		94	57 - 140
Bromomethane	50.0	33.7		ug/L		67	10 - 160
2-Butanone (MEK)	200	253		ug/L		127	61 - 145
Carbon disulfide	50.0	42.2		ug/L		84	61 - 137
Carbon tetrachloride	50.0	42.4		ug/L		85	61 - 137
Chlorobenzene	50.0	49.1		ug/L		98	70 - 130
Dibromochloromethane	50.0	46.6		ug/L		93	67 - 135
Chloroethane	50.0	43.3		ug/L		87	55 - 141

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

Lab Sample ID: LCS 400-448795/1002
Matrix: Water
Analysis Batch: 448795

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	28.2		ug/L		56	10 - 160
Chloroform	50.0	46.7		ug/L		93	69 - 130
1-Chlorohexane	50.0	46.0		ug/L		92	69 - 130
Chloromethane	50.0	49.6		ug/L		99	58 - 137
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	49.1		ug/L		98	69 - 132
1,2-Dichlorobenzene	50.0	48.5		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	49.9		ug/L		100	70 - 130
1,4-Dichlorobenzene	50.0	49.6		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	46.9		ug/L		94	41 - 146
1,1-Dichloroethane	50.0	47.3		ug/L		95	70 - 130
1,2-Dichloroethane	50.0	45.5		ug/L		91	69 - 130
1,1-Dichloroethene	50.0	44.1		ug/L		88	63 - 134
1,2-Dichloropropane	50.0	50.8		ug/L		102	70 - 130
1,3-Dichloropropane	50.0	49.3		ug/L		99	70 - 130
2,2-Dichloropropane	50.0	43.3		ug/L		87	52 - 135
1,1-Dichloropropene	50.0	48.3		ug/L		97	70 - 130
Ethylbenzene	50.0	46.9		ug/L		94	70 - 130
Ethyl methacrylate	50.0	47.6		ug/L		95	68 - 130
Hexachlorobutadiene	50.0	58.9		ug/L		118	53 - 140
2-Hexanone	200	208		ug/L		104	65 - 137
Isopropylbenzene	50.0	46.2		ug/L		92	70 - 130
Methylene bromide	50.0	45.1		ug/L		90	70 - 130
Methylene Chloride	50.0	52.7		ug/L		105	66 - 135
4-Methyl-2-pentanone (MIBK)	200	186		ug/L		93	69 - 138
Methyl tert-butyl ether	50.0	45.9		ug/L		92	66 - 130
m-Xylene & p-Xylene	50.0	47.9		ug/L		96	70 - 130
Naphthalene	50.0	45.1		ug/L		90	47 - 149
n-Butylbenzene	50.0	50.3		ug/L		101	67 - 130
N-Propylbenzene	50.0	52.3		ug/L		105	70 - 130
o-Chlorotoluene	50.0	53.4		ug/L		107	70 - 130
o-Xylene	50.0	46.3		ug/L		93	70 - 130
p-Chlorotoluene	50.0	53.8		ug/L		108	70 - 130
p-Isopropyltoluene	50.0	52.4		ug/L		105	65 - 130
sec-Butylbenzene	50.0	51.4		ug/L		103	66 - 130
Styrene	50.0	44.2		ug/L		88	70 - 130
tert-Butylbenzene	50.0	51.0		ug/L		102	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	57.7		ug/L		115	70 - 131
Tetrachloroethene	50.0	43.0		ug/L		86	65 - 130
Toluene	50.0	49.2		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	46.7		ug/L		93	70 - 130
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	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	44.4		ug/L		89	68 - 130
1,1,2-Trichloroethane	50.0	49.3		ug/L		99	70 - 130
Trichloroethene	50.0	47.5		ug/L		95	70 - 130
Trichlorofluoromethane	50.0	41.0		ug/L		82	65 - 138

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

Lab Sample ID: LCS 400-448795/1002
Matrix: Water
Analysis Batch: 448795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	53.3		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	55.0		ug/L		110	69 - 130
Vinyl acetate	100	102		ug/L		102	26 - 160
Vinyl chloride	50.0	53.5		ug/L		107	59 - 136
Xylenes, Total	100	94.3		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 400-173131-11 MS
Matrix: Water
Analysis Batch: 448795

Client Sample ID: P74-ROX-071219-
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	90.9		ug/L		45	43 - 150
Acrolein	ND		500	554		ug/L		111	38 - 150
Acrylonitrile	ND		500	466		ug/L		93	62 - 149
Benzene	4.5		50.0	53.0		ug/L		97	56 - 142
Bromobenzene	ND		50.0	46.9		ug/L		94	59 - 136
Bromochloromethane	ND		50.0	44.0		ug/L		88	64 - 140
Bromodichloromethane	ND		50.0	44.4		ug/L		89	59 - 143
Bromoform	ND		50.0	42.0		ug/L		84	50 - 140
Bromomethane	ND		50.0	31.0		ug/L		62	10 - 150
2-Butanone (MEK)	ND		200	160		ug/L		80	55 - 150
Carbon disulfide	ND		50.0	40.9		ug/L		82	48 - 150
Carbon tetrachloride	ND		50.0	42.3		ug/L		85	55 - 145
Chlorobenzene	ND		50.0	47.6		ug/L		95	64 - 130
Dibromochloromethane	ND		50.0	44.8		ug/L		90	56 - 143
Chloroethane	ND		50.0	43.0		ug/L		86	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	45.4		ug/L		91	60 - 141
1-Chlorohexane	ND		50.0	47.3		ug/L		95	56 - 136
Chloromethane	ND		50.0	44.1		ug/L		88	49 - 148
cis-1,2-Dichloroethene	ND		50.0	46.4		ug/L		93	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.6		ug/L		93	57 - 140
1,2-Dichlorobenzene	ND		50.0	46.1		ug/L		92	52 - 137
1,3-Dichlorobenzene	ND		50.0	47.7		ug/L		95	54 - 135
1,4-Dichlorobenzene	ND		50.0	47.4		ug/L		95	53 - 135
Dichlorodifluoromethane	ND		50.0	42.5		ug/L		85	16 - 150
1,1-Dichloroethane	ND		50.0	46.6		ug/L		93	61 - 144
1,2-Dichloroethane	ND		50.0	44.6		ug/L		89	60 - 141
1,1-Dichloroethene	ND		50.0	43.0		ug/L		86	54 - 147
1,2-Dichloropropane	ND		50.0	49.1		ug/L		98	66 - 137
1,3-Dichloropropane	ND		50.0	50.0		ug/L		100	66 - 133
2,2-Dichloropropane	ND		50.0	40.5		ug/L		81	42 - 144

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

Lab Sample ID: 400-173131-11 MS
Matrix: Water
Analysis Batch: 448795

Client Sample ID: P74-ROX-071219-
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	46.2		ug/L		92	65 - 136
Ethylbenzene	ND		50.0	46.1		ug/L		92	58 - 131
Ethyl methacrylate	ND		50.0	47.6		ug/L		95	64 - 130
Hexachlorobutadiene	ND		50.0	54.9		ug/L		110	31 - 149
2-Hexanone	ND		200	163		ug/L		82	65 - 140
Isopropylbenzene	ND		50.0	44.2		ug/L		88	56 - 133
Methylene bromide	ND		50.0	44.8		ug/L		90	63 - 138
Methylene Chloride	ND		50.0	49.6		ug/L		99	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	172		ug/L		86	63 - 146
Methyl tert-butyl ether	ND		50.0	44.0		ug/L		88	59 - 137
m-Xylene & p-Xylene	ND		50.0	47.3		ug/L		95	57 - 130
Naphthalene	ND		50.0	41.1		ug/L		82	25 - 150
n-Butylbenzene	ND		50.0	47.6		ug/L		95	41 - 142
N-Propylbenzene	ND		50.0	48.4		ug/L		97	51 - 138
o-Chlorotoluene	ND		50.0	49.8		ug/L		100	53 - 134
o-Xylene	ND		50.0	45.8		ug/L		92	61 - 130
p-Chlorotoluene	ND		50.0	50.2		ug/L		100	54 - 133
p-Isopropyltoluene	ND		50.0	48.2		ug/L		96	48 - 139
sec-Butylbenzene	ND		50.0	48.6		ug/L		97	50 - 138
Styrene	ND		50.0	43.9		ug/L		88	58 - 131
tert-Butylbenzene	ND		50.0	47.7		ug/L		95	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	43.2		ug/L		86	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	54.4		ug/L		109	66 - 135
Tetrachloroethene	ND		50.0	40.2		ug/L		80	52 - 133
Toluene	1.1		50.0	49.3		ug/L		96	65 - 130
trans-1,2-Dichloroethene	ND		50.0	45.4		ug/L		91	61 - 143
trans-1,3-Dichloropropene	ND		50.0	46.0		ug/L		92	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	46.5		ug/L		93	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	47.4		ug/L		95	39 - 148
1,1,1-Trichloroethane	ND		50.0	42.9		ug/L		86	57 - 142
1,1,2-Trichloroethane	ND		50.0	48.7		ug/L		97	66 - 131
Trichloroethene	ND		50.0	46.6		ug/L		93	64 - 136
Trichlorofluoromethane	ND		50.0	38.9		ug/L		78	54 - 150
1,2,3-Trichloropropane	ND		50.0	51.4		ug/L		103	65 - 133
1,2,4-Trimethylbenzene	2.0		50.0	51.7		ug/L		99	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	50.4		ug/L		101	52 - 135
Vinyl acetate	ND		100	91.7		ug/L		92	26 - 150
Vinyl chloride	ND		50.0	48.0		ug/L		96	46 - 150
Xylenes, Total	ND		100	93.1		ug/L		93	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*78 - 118*
Dibromofluoromethane	*97*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 400-173131-11 MSD
Matrix: Water
Analysis Batch: 448795

Client Sample ID: P74-ROX-071219-
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	92.5		ug/L		46	43 - 150	2	30
Acrolein	ND		500	564		ug/L		113	38 - 150	2	31
Acrylonitrile	ND		500	474		ug/L		95	62 - 149	2	30
Benzene	4.5		50.0	53.0		ug/L		97	56 - 142	0	30
Bromobenzene	ND		50.0	48.7		ug/L		97	59 - 136	4	30
Bromochloromethane	ND		50.0	42.7		ug/L		85	64 - 140	3	30
Bromodichloromethane	ND		50.0	44.1		ug/L		88	59 - 143	1	30
Bromoform	ND		50.0	43.3		ug/L		87	50 - 140	3	30
Bromomethane	ND		50.0	33.9		ug/L		68	10 - 150	9	50
2-Butanone (MEK)	ND		200	159		ug/L		80	55 - 150	0	30
Carbon disulfide	ND		50.0	41.7		ug/L		83	48 - 150	2	30
Carbon tetrachloride	ND		50.0	42.4		ug/L		85	55 - 145	0	30
Chlorobenzene	ND		50.0	47.3		ug/L		95	64 - 130	1	30
Dibromochloromethane	ND		50.0	42.3		ug/L		85	56 - 143	6	30
Chloroethane	ND		50.0	42.7		ug/L		85	50 - 150	1	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	45.8		ug/L		92	60 - 141	1	30
1-Chlorohexane	ND		50.0	45.0		ug/L		90	56 - 136	5	30
Chloromethane	ND		50.0	45.6		ug/L		91	49 - 148	3	31
cis-1,2-Dichloroethene	ND		50.0	46.3		ug/L		93	59 - 143	0	30
cis-1,3-Dichloropropene	ND		50.0	47.7		ug/L		95	57 - 140	2	30
1,2-Dichlorobenzene	ND		50.0	46.1		ug/L		92	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	47.2		ug/L		94	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	46.4		ug/L		93	53 - 135	2	30
Dichlorodifluoromethane	ND		50.0	43.6		ug/L		87	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	46.9		ug/L		94	61 - 144	1	30
1,2-Dichloroethane	ND		50.0	44.5		ug/L		89	60 - 141	0	30
1,1-Dichloroethene	ND		50.0	43.6		ug/L		87	54 - 147	1	30
1,2-Dichloropropane	ND		50.0	49.7		ug/L		99	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	48.4		ug/L		97	66 - 133	3	30
2,2-Dichloropropane	ND		50.0	41.2		ug/L		82	42 - 144	2	31
1,1-Dichloropropene	ND		50.0	45.7		ug/L		91	65 - 136	1	30
Ethylbenzene	ND		50.0	44.9		ug/L		90	58 - 131	2	30
Ethyl methacrylate	ND		50.0	46.4		ug/L		93	64 - 130	3	30
Hexachlorobutadiene	ND		50.0	54.1		ug/L		108	31 - 149	1	36
2-Hexanone	ND		200	155		ug/L		78	65 - 140	5	30
Isopropylbenzene	ND		50.0	43.5		ug/L		87	56 - 133	2	30
Methylene bromide	ND		50.0	43.9		ug/L		88	63 - 138	2	30
Methylene Chloride	ND		50.0	49.2		ug/L		98	60 - 146	1	32
4-Methyl-2-pentanone (MIBK)	ND		200	168		ug/L		84	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	45.0		ug/L		90	59 - 137	2	30
m-Xylene & p-Xylene	ND		50.0	45.9		ug/L		92	57 - 130	3	30
Naphthalene	ND		50.0	42.5		ug/L		85	25 - 150	4	30
n-Butylbenzene	ND		50.0	46.9		ug/L		94	41 - 142	2	31
N-Propylbenzene	ND		50.0	48.5		ug/L		97	51 - 138	0	30
o-Chlorotoluene	ND		50.0	50.0		ug/L		100	53 - 134	0	30
o-Xylene	ND		50.0	43.7		ug/L		87	61 - 130	5	30
p-Chlorotoluene	ND		50.0	50.3		ug/L		101	54 - 133	0	30

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

Lab Sample ID: 400-173131-11 MSD
Matrix: Water
Analysis Batch: 448795

Client Sample ID: P74-ROX-071219-
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	48.0		ug/L		96	48 - 139	0	30
sec-Butylbenzene	ND		50.0	48.8		ug/L		98	50 - 138	1	30
Styrene	ND		50.0	42.4		ug/L		85	58 - 131	3	30
tert-Butylbenzene	ND		50.0	47.5		ug/L		95	54 - 146	0	30
1,1,1,2-Tetrachloroethane	ND		50.0	42.7		ug/L		85	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	54.7		ug/L		109	66 - 135	1	30
Tetrachloroethene	ND		50.0	37.7		ug/L		75	52 - 133	6	30
Toluene	1.1		50.0	48.2		ug/L		94	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	46.9		ug/L		94	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	44.0		ug/L		88	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	46.7		ug/L		93	43 - 145	0	30
1,2,4-Trichlorobenzene	ND		50.0	47.3		ug/L		95	39 - 148	0	30
1,1,1-Trichloroethane	ND		50.0	42.8		ug/L		86	57 - 142	0	30
1,1,2-Trichloroethane	ND		50.0	47.3		ug/L		95	66 - 131	3	30
Trichloroethene	ND		50.0	45.0		ug/L		90	64 - 136	3	30
Trichlorofluoromethane	ND		50.0	42.6		ug/L		85	54 - 150	9	30
1,2,3-Trichloropropane	ND		50.0	49.5		ug/L		99	65 - 133	4	30
1,2,4-Trimethylbenzene	2.0		50.0	52.0		ug/L		100	50 - 139	1	30
1,3,5-Trimethylbenzene	ND		50.0	50.7		ug/L		101	52 - 135	1	30
Vinyl acetate	ND		100	93.5		ug/L		94	26 - 150	2	33
Vinyl chloride	ND		50.0	50.9		ug/L		102	46 - 150	6	30
Xylenes, Total	ND		100	89.7		ug/L		90	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 400-448870/4
Matrix: Water
Analysis Batch: 448870

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/21/19 10:21	1
Acrolein	ND		20	10	ug/L			07/21/19 10:21	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/19 10:21	1
Benzene	ND		1.0	0.38	ug/L			07/21/19 10:21	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/19 10:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/21/19 10:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Bromoform	ND		5.0	0.71	ug/L			07/21/19 10:21	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/19 10:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/21/19 10:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/19 10:21	1

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

Lab Sample ID: MB 400-448870/4
Matrix: Water
Analysis Batch: 448870

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			07/21/19 10:21	1
Chloroform	ND		1.0	0.60	ug/L			07/21/19 10:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/21/19 10:21	1
Chloromethane	ND		1.0	0.83	ug/L			07/21/19 10:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/19 10:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/19 10:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/19 10:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/19 10:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/21/19 10:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/19 10:21	1
2-Hexanone	ND		25	3.1	ug/L			07/21/19 10:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/21/19 10:21	1
Methylene bromide	ND		5.0	0.59	ug/L			07/21/19 10:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/19 10:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/21/19 10:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/21/19 10:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/21/19 10:21	1
Naphthalene	ND		1.0	1.0	ug/L			07/21/19 10:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/21/19 10:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/21/19 10:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/19 10:21	1
o-Xylene	ND		5.0	0.60	ug/L			07/21/19 10:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/19 10:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/21/19 10:21	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/21/19 10:21	1
Styrene	ND		1.0	1.0	ug/L			07/21/19 10:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/19 10:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/21/19 10:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/21/19 10:21	1
Toluene	ND		1.0	0.41	ug/L			07/21/19 10:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/19 10:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/21/19 10:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/19 10:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/21/19 10:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/21/19 10:21	1
Trichloroethene	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/21/19 10:21	1

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

Lab Sample ID: MB 400-448870/4
Matrix: Water
Analysis Batch: 448870

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/19 10:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/21/19 10:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/21/19 10:21	1
Vinyl acetate	ND		25	2.0	ug/L			07/21/19 10:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/19 10:21	1
Xylenes, Total	ND		10	1.6	ug/L			07/21/19 10:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/21/19 10:21*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/21/19 10:21*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/21/19 10:21*	*1*

Lab Sample ID: LCS 400-448870/1002
Matrix: Water
Analysis Batch: 448870

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	225		ug/L		113	43 - 160
Acrolein	500	666		ug/L		133	38 - 160
Acrylonitrile	500	524		ug/L		105	64 - 142
Benzene	50.0	51.1		ug/L		102	70 - 130
Bromobenzene	50.0	49.8		ug/L		100	70 - 132
Bromochloromethane	50.0	45.2		ug/L		90	70 - 130
Bromodichloromethane	50.0	46.1		ug/L		92	67 - 133
Bromoform	50.0	48.0		ug/L		96	57 - 140
Bromomethane	50.0	29.1		ug/L		58	10 - 160
2-Butanone (MEK)	200	277		ug/L		138	61 - 145
Carbon disulfide	50.0	43.6		ug/L		87	61 - 137
Carbon tetrachloride	50.0	44.9		ug/L		90	61 - 137
Chlorobenzene	50.0	47.7		ug/L		95	70 - 130
Dibromochloromethane	50.0	46.2		ug/L		92	67 - 135
Chloroethane	50.0	46.9		ug/L		94	55 - 141
2-Chloroethyl vinyl ether	50.0	25.9		ug/L		52	10 - 160
Chloroform	50.0	47.5		ug/L		95	69 - 130
1-Chlorohexane	50.0	44.1		ug/L		88	69 - 130
Chloromethane	50.0	53.8		ug/L		108	58 - 137
cis-1,2-Dichloroethene	50.0	49.4		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	50.0		ug/L		100	69 - 132
1,2-Dichlorobenzene	50.0	47.1		ug/L		94	67 - 130
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	47.7		ug/L		95	70 - 130
Dichlorodifluoromethane	50.0	48.6		ug/L		97	41 - 146
1,1-Dichloroethane	50.0	48.5		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	46.5		ug/L		93	69 - 130
1,1-Dichloroethene	50.0	45.4		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	53.0		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	48.3		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	43.7		ug/L		87	52 - 135

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

Lab Sample ID: LCS 400-448870/1002
Matrix: Water
Analysis Batch: 448870

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	48.6		ug/L		97	70 - 130
Ethylbenzene	50.0	44.9		ug/L		90	70 - 130
Ethyl methacrylate	50.0	45.8		ug/L		92	68 - 130
Hexachlorobutadiene	50.0	57.8		ug/L		116	53 - 140
2-Hexanone	200	207		ug/L		104	65 - 137
Isopropylbenzene	50.0	43.9		ug/L		88	70 - 130
Methylene bromide	50.0	47.5		ug/L		95	70 - 130
Methylene Chloride	50.0	53.8		ug/L		108	66 - 135
4-Methyl-2-pentanone (MIBK)	200	198		ug/L		99	69 - 138
Methyl tert-butyl ether	50.0	47.4		ug/L		95	66 - 130
m-Xylene & p-Xylene	50.0	45.1		ug/L		90	70 - 130
Naphthalene	50.0	43.8		ug/L		88	47 - 149
n-Butylbenzene	50.0	48.4		ug/L		97	67 - 130
N-Propylbenzene	50.0	50.4		ug/L		101	70 - 130
o-Chlorotoluene	50.0	51.2		ug/L		102	70 - 130
o-Xylene	50.0	44.3		ug/L		89	70 - 130
p-Chlorotoluene	50.0	51.3		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	50.3		ug/L		101	65 - 130
sec-Butylbenzene	50.0	50.0		ug/L		100	66 - 130
Styrene	50.0	42.5		ug/L		85	70 - 130
tert-Butylbenzene	50.0	48.5		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.1		ug/L		88	67 - 131
1,1,2,2-Tetrachloroethane	50.0	56.0		ug/L		112	70 - 131
Tetrachloroethene	50.0	41.7		ug/L		83	65 - 130
Toluene	50.0	47.5		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 130
trans-1,3-Dichloropropene	50.0	44.3		ug/L		89	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	48.8		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	44.9		ug/L		90	68 - 130
1,1,2-Trichloroethane	50.0	48.1		ug/L		96	70 - 130
Trichloroethene	50.0	48.3		ug/L		97	70 - 130
Trichlorofluoromethane	50.0	46.6		ug/L		93	65 - 138
1,2,3-Trichloropropane	50.0	52.3		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	51.3		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	51.7		ug/L		103	69 - 130
Vinyl acetate	100	108		ug/L		108	26 - 160
Vinyl chloride	50.0	57.2		ug/L		114	59 - 136
Xylenes, Total	100	89.3		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*78 - 118*
Dibromofluoromethane	*97*		*81 - 121*
Toluene-d8 (Surr)	*94*		*80 - 120*

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

Lab Sample ID: MB 400-448434/1-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/17/19 14:25	07/20/19 19:11	1
Benzenethiol	ND		10	1.7	ug/L		07/17/19 14:25	07/20/19 19:11	1
Benzoic acid	ND		30	7.3	ug/L		07/17/19 14:25	07/20/19 19:11	1
Benzyl alcohol	ND		10	2.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/17/19 14:25	07/20/19 19:11	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/17/19 14:25	07/20/19 19:11	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/17/19 14:25	07/20/19 19:11	1
Bis(2-ethylhexyl) phthalate	13.0		10	5.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/17/19 14:25	07/20/19 19:11	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/17/19 14:25	07/20/19 19:11	1
4-Chloroaniline	ND		10	3.4	ug/L		07/17/19 14:25	07/20/19 19:11	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/17/19 14:25	07/20/19 19:11	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/17/19 14:25	07/20/19 19:11	1
2-Chlorophenol	ND		10	2.2	ug/L		07/17/19 14:25	07/20/19 19:11	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
Dibenzofuran	ND		10	0.52	ug/L		07/17/19 14:25	07/20/19 19:11	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
Diethyl phthalate	ND		10	0.70	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/17/19 14:25	07/20/19 19:11	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/17/19 14:25	07/20/19 19:11	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/17/19 14:25	07/20/19 19:11	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/17/19 14:25	07/20/19 19:11	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/17/19 14:25	07/20/19 19:11	1
1,4-Dioxane	ND		10	1.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/17/19 14:25	07/20/19 19:11	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/17/19 14:25	07/20/19 19:11	1
Hexachloroethane	ND		10	4.2	ug/L		07/17/19 14:25	07/20/19 19:11	1
Indene	ND		10	1.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
Isophorone	ND		10	0.57	ug/L		07/17/19 14:25	07/20/19 19:11	1
2-Methylphenol	ND		10	1.8	ug/L		07/17/19 14:25	07/20/19 19:11	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
2-Nitroaniline	ND		10	2.2	ug/L		07/17/19 14:25	07/20/19 19:11	1
3-Nitroaniline	ND		10	1.8	ug/L		07/17/19 14:25	07/20/19 19:11	1
4-Nitroaniline	ND		10	2.5	ug/L		07/17/19 14:25	07/20/19 19:11	1
Nitrobenzene	ND		10	0.55	ug/L		07/17/19 14:25	07/20/19 19:11	1
2-Nitrophenol	ND		10	0.65	ug/L		07/17/19 14:25	07/20/19 19:11	1
4-Nitrophenol	ND		10	2.1	ug/L		07/17/19 14:25	07/20/19 19:11	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/17/19 14:25	07/20/19 19:11	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/17/19 14:25	07/20/19 19:11	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/17/19 14:25	07/20/19 19:11	1
Pentachlorophenol	ND		20	1.8	ug/L		07/17/19 14:25	07/20/19 19:11	1
Phenol	ND		10	2.6	ug/L		07/17/19 14:25	07/20/19 19:11	1

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

Lab Sample ID: MB 400-448434/1-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		07/17/19 14:25	07/20/19 19:11	1
Quinoline	ND		10	6.0	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/17/19 14:25	07/20/19 19:11	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/17/19 14:25	07/20/19 19:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*07/17/19 14:25*	*07/20/19 19:11*	*1*
2-Fluorophenol	*42*		*10 - 120*	*07/17/19 14:25*	*07/20/19 19:11*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*07/17/19 14:25*	*07/20/19 19:11*	*1*
Phenol-d5	*52*		*10 - 120*	*07/17/19 14:25*	*07/20/19 19:11*	*1*
Terphenyl-d14	*63*		*53 - 125*	*07/17/19 14:25*	*07/20/19 19:11*	*1*
2,4,6-Tribromophenol	*90*		*15 - 135*	*07/17/19 14:25*	*07/20/19 19:11*	*1*

Lab Sample ID: LCS 400-448434/22-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		1	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*56*		*27 - 120*
Phenol-d5	*47*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*
2,4,6-Tribromophenol	*79*		*15 - 135*

Lab Sample ID: LCS 400-448434/2-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	17.9		ug/L		60	29 - 120
Benzoic acid	117	47.4		ug/L		41	10 - 150
Benzyl alcohol	30.0	20.2		ug/L		67	19 - 125
Bis(2-chloroethoxy)methane	30.0	17.0		ug/L		57	45 - 120
Bis(2-chloroethyl)ether	30.0	15.9		ug/L		53	48 - 120
bis (2-chloroisopropyl) ether	30.0	14.7		ug/L		49	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	19.4		ug/L		65	48 - 150
4-Bromophenyl phenyl ether	30.0	28.3		ug/L		94	55 - 122
Butyl benzyl phthalate	30.0	18.6		ug/L		62	46 - 145
4-Chloroaniline	30.0	14.3		ug/L		48	30 - 120
4-Chloro-3-methylphenol	30.0	21.5		ug/L		72	39 - 140
2-Chloronaphthalene	30.0	22.4		ug/L		75	52 - 120
2-Chlorophenol	30.0	18.3		ug/L		61	34 - 120
4-Chlorophenyl phenyl ether	30.0	26.7		ug/L		89	58 - 124
Dibenz[a,h]acridine	30.0	23.7		ug/L		79	46 - 149

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

Lab Sample ID: LCS 400-448434/2-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	30.0	24.3		ug/L		81	58 - 123
3,3'-Dichlorobenzidine	40.0	53.3		ug/L		133	39 - 135
2,4-Dichlorophenol	30.0	22.6		ug/L		75	39 - 128
Diethyl phthalate	30.0	24.3		ug/L		81	44 - 146
2,4-Dimethylphenol	30.0	20.6		ug/L		69	44 - 120
Dimethyl phthalate	30.0	23.6		ug/L		79	50 - 131
Di-n-butyl phthalate	30.0	23.1		ug/L		77	55 - 131
4,6-Dinitro-ortho-cresol	60.0	52.0		ug/L		87	10 - 150
2,4-Dinitrophenol	60.0	67.2		ug/L		112	10 - 150
2,4-Dinitrotoluene	30.0	25.9		ug/L		86	58 - 140
2,6-Dinitrotoluene	30.0	25.2		ug/L		84	57 - 130
Di-n-octyl phthalate	30.0	22.1		ug/L		74	50 - 150
1,4-Dioxane	30.0	10.7		ug/L		36	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.7		ug/L		59	47 - 123
Hexachlorobenzene	30.0	32.6		ug/L		109	52 - 131
Hexachlorocyclopentadiene	30.0	11.7	J	ug/L		39	10 - 129
Hexachloroethane	30.0	14.3		ug/L		48	41 - 120
Indene	30.0	18.9		ug/L		63	47 - 120
Isophorone	30.0	17.8		ug/L		59	49 - 120
2-Methylphenol	30.0	18.1		ug/L		60	39 - 123
3 & 4 Methylphenol	30.0	18.4	J	ug/L		61	38 - 121
2-Nitroaniline	30.0	20.0		ug/L		67	47 - 150
3-Nitroaniline	30.0	22.7		ug/L		76	34 - 132
4-Nitroaniline	30.0	29.8		ug/L		99	41 - 135
Nitrobenzene	30.0	18.6		ug/L		62	47 - 120
2-Nitrophenol	30.0	20.6		ug/L		69	28 - 136
4-Nitrophenol	60.0	42.3		ug/L		71	10 - 150
N-Nitrosodimethylamine	30.0	23.6		ug/L		79	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.4		ug/L		65	44 - 120
N-Nitrosodiphenylamine	29.8	22.9		ug/L		77	56 - 120
Pentachlorophenol	60.0	58.6		ug/L		98	15 - 141
Phenol	30.0	15.2		ug/L		51	33 - 120
Pyridine	60.0	29.7		ug/L		49	26 - 120
Quinoline	30.0	21.4		ug/L		71	51 - 129
2,4,5-Trichlorophenol	30.0	25.5		ug/L		85	38 - 147
2,4,6-Trichlorophenol	30.0	25.2		ug/L		84	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*39*		*10 - 120*
Nitrobenzene-d5	*59*		*27 - 120*
Phenol-d5	*51*		*10 - 120*
Terphenyl-d14	*89*		*53 - 125*
2,4,6-Tribromophenol	*123*		*15 - 135*

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

Lab Sample ID: LCSD 400-448434/23-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	24	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*38*		*10 - 120*
Nitrobenzene-d5	*58*		*27 - 120*
Phenol-d5	*52*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*84*		*15 - 135*

Lab Sample ID: LCSD 400-448434/3-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	18.4		ug/L		61	29 - 120	3	30
Benzoic acid	117	35.8		ug/L		31	10 - 150	28	30
Benzyl alcohol	30.0	22.2		ug/L		74	19 - 125	10	30
Bis(2-chloroethoxy)methane	30.0	18.0		ug/L		60	45 - 120	5	30
Bis(2-chloroethyl)ether	30.0	17.1		ug/L		57	48 - 120	7	30
bis (2-chloroisopropyl) ether	30.0	16.5		ug/L		55	30 - 125	12	30
Bis(2-ethylhexyl) phthalate	30.0	20.0		ug/L		67	48 - 150	3	30
4-Bromophenyl phenyl ether	30.0	29.1		ug/L		97	55 - 122	3	30
Butyl benzyl phthalate	30.0	18.9		ug/L		63	46 - 145	2	30
4-Chloroaniline	30.0	15.1		ug/L		50	30 - 120	5	30
4-Chloro-3-methylphenol	30.0	22.4		ug/L		75	39 - 140	4	30
2-Chloronaphthalene	30.0	22.8		ug/L		76	52 - 120	2	30
2-Chlorophenol	30.0	18.7		ug/L		62	34 - 120	3	30
4-Chlorophenyl phenyl ether	30.0	27.1		ug/L		90	58 - 124	1	30
Dibenz[a,h]acridine	30.0	24.4		ug/L		81	46 - 149	3	30
Dibenzofuran	30.0	24.7		ug/L		82	58 - 123	2	30
3,3'-Dichlorobenzidine	40.0	58.2	*	ug/L		145	39 - 135	9	30
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128	2	30
Diethyl phthalate	30.0	25.6		ug/L		85	44 - 146	5	30
2,4-Dimethylphenol	30.0	22.4		ug/L		75	44 - 120	8	30
Dimethyl phthalate	30.0	24.2		ug/L		81	50 - 131	2	30
Di-n-butyl phthalate	30.0	24.0		ug/L		80	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	55.3		ug/L		92	10 - 150	6	30
2,4-Dinitrophenol	60.0	70.9		ug/L		118	10 - 150	5	30
2,4-Dinitrotoluene	30.0	25.9		ug/L		86	58 - 140	0	30
2,6-Dinitrotoluene	30.0	25.6		ug/L		85	57 - 130	2	30
Di-n-octyl phthalate	30.0	23.0		ug/L		77	50 - 150	4	30
1,4-Dioxane	30.0	11.2		ug/L		37	25 - 120	4	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.1		ug/L		67	47 - 123	13	30
Hexachlorobenzene	30.0	33.4		ug/L		111	52 - 131	2	30
Hexachlorocyclopentadiene	30.0	10.4	J	ug/L		35	10 - 129	12	30
Hexachloroethane	30.0	13.9		ug/L		46	41 - 120	2	30

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

Lab Sample ID: LCSD 400-448434/3-A
Matrix: Water
Analysis Batch: 448799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	30.0	16.9		ug/L		56	47 - 120	11	30
Isophorone	30.0	19.1		ug/L		64	49 - 120	7	30
2-Methylphenol	30.0	19.4		ug/L		65	39 - 123	7	30
3 & 4 Methylphenol	30.0	20.2		ug/L		67	38 - 121	10	30
2-Nitroaniline	30.0	22.5		ug/L		75	47 - 150	12	30
3-Nitroaniline	30.0	24.5		ug/L		82	34 - 132	8	30
4-Nitroaniline	30.0	33.7		ug/L		112	41 - 135	12	30
Nitrobenzene	30.0	19.6		ug/L		65	47 - 120	5	30
2-Nitrophenol	30.0	20.9		ug/L		70	28 - 136	2	30
4-Nitrophenol	60.0	47.0		ug/L		78	10 - 150	10	30
N-Nitrosodimethylamine	30.0	24.2		ug/L		81	22 - 148	3	30
N-Nitrosodi-n-propylamine	30.0	21.9		ug/L		73	44 - 120	12	30
N-Nitrosodiphenylamine	29.8	23.2		ug/L		78	56 - 120	1	30
Pentachlorophenol	60.0	58.2		ug/L		97	15 - 141	1	30
Phenol	30.0	15.3		ug/L		51	33 - 120	1	30
Pyridine	60.0	32.4		ug/L		54	26 - 120	9	30
Quinoline	30.0	22.8		ug/L		76	51 - 129	6	30
2,4,5-Trichlorophenol	30.0	24.5		ug/L		82	38 - 147	4	30
2,4,6-Trichlorophenol	30.0	26.0		ug/L		87	36 - 139	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*65*		*27 - 120*
Phenol-d5	*50*		*10 - 120*
Terphenyl-d14	*84*		*53 - 125*
2,4,6-Tribromophenol	*105*		*15 - 135*

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
Benzenethiol	ND		10	1.7	ug/L		07/18/19 16:34	07/24/19 01:33	1
Benzoic acid	ND		30	7.3	ug/L		07/18/19 16:34	07/24/19 01:33	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/18/19 16:34	07/24/19 01:33	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/18/19 16:34	07/24/19 01:33	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/18/19 16:34	07/24/19 01:33	1
Bis(2-ethylhexyl) phthalate	8.53	J	10	5.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/18/19 16:34	07/24/19 01:33	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/19 16:34	07/24/19 01:33	1

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Dibenzofuran	ND		10	0.52	ug/L		07/18/19 16:34	07/24/19 01:33	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Diethyl phthalate	ND		10	0.70	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/19 16:34	07/24/19 01:33	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/18/19 16:34	07/24/19 01:33	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/19 16:34	07/24/19 01:33	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/24/19 01:33	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/18/19 16:34	07/24/19 01:33	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/18/19 16:34	07/24/19 01:33	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/19 16:34	07/24/19 01:33	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
Indene	ND		10	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Isophorone	ND		10	0.57	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Nitroaniline	ND		10	2.5	ug/L		07/18/19 16:34	07/24/19 01:33	1
Nitrobenzene	ND		10	0.55	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Nitrophenol	ND		10	0.65	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/19 16:34	07/24/19 01:33	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/19 16:34	07/24/19 01:33	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/19 16:34	07/24/19 01:33	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/18/19 16:34	07/24/19 01:33	1
Pentachlorophenol	ND		20	1.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
Phenol	ND		10	2.6	ug/L		07/18/19 16:34	07/24/19 01:33	1
Pyridine	ND		10	3.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
Quinoline	ND		10	6.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/19 16:34	07/24/19 01:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*34 - 120*	*07/18/19 16:34*	*07/24/19 01:33*	*1*
2-Fluorophenol	*35*		*10 - 120*	*07/18/19 16:34*	*07/24/19 01:33*	*1*
Nitrobenzene-d5	*52*		*27 - 120*	*07/18/19 16:34*	*07/24/19 01:33*	*1*
Phenol-d5	*45*		*10 - 120*	*07/18/19 16:34*	*07/24/19 01:33*	*1*
Terphenyl-d14	*73*		*53 - 125*	*07/18/19 16:34*	*07/24/19 01:33*	*1*
2,4,6-Tribromophenol	*83*		*15 - 135*	*07/18/19 16:34*	*07/24/19 01:33*	*1*

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

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	15.5		ug/L		52	29 - 120
Benzoic acid	117	25.0	J	ug/L		21	10 - 150
Benzyl alcohol	30.0	17.3		ug/L		58	19 - 125
Bis(2-chloroethoxy)methane	30.0	15.1		ug/L		50	45 - 120
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120
bis (2-chloroisopropyl) ether	30.0	13.9		ug/L		46	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	17.8		ug/L		59	48 - 150
4-Bromophenyl phenyl ether	30.0	27.3		ug/L		91	55 - 122
Butyl benzyl phthalate	30.0	15.6		ug/L		52	46 - 145
4-Chloroaniline	30.0	13.5		ug/L		45	30 - 120
4-Chloro-3-methylphenol	30.0	19.8		ug/L		66	39 - 140
2-Chloronaphthalene	30.0	19.6		ug/L		65	52 - 120
2-Chlorophenol	30.0	17.5		ug/L		58	34 - 120
4-Chlorophenyl phenyl ether	30.0	23.9		ug/L		80	58 - 124
Dibenz[a,h]acridine	30.0	22.4		ug/L		75	46 - 149
Dibenzofuran	30.0	21.0		ug/L		70	58 - 123
3,3'-Dichlorobenzidine	40.0	57.6	*	ug/L		144	39 - 135
2,4-Dichlorophenol	30.0	20.6		ug/L		69	39 - 128
Diethyl phthalate	30.0	22.5		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	19.3		ug/L		64	44 - 120
Dimethyl phthalate	30.0	22.2		ug/L		74	50 - 131
Di-n-butyl phthalate	30.0	20.6		ug/L		69	55 - 131
4,6-Dinitro-ortho-cresol	60.0	49.2		ug/L		82	10 - 150
2,4-Dinitrophenol	60.0	60.8		ug/L		101	10 - 150
2,4-Dinitrotoluene	30.0	23.4		ug/L		78	58 - 140
2,6-Dinitrotoluene	30.0	23.2		ug/L		77	57 - 130
Di-n-octyl phthalate	30.0	19.9		ug/L		66	50 - 150
1,4-Dioxane	30.0	11.7		ug/L		39	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	16.0		ug/L		53	47 - 123
Hexachlorobenzene	30.0	29.8		ug/L		99	52 - 131
Hexachlorocyclopentadiene	30.0	8.59	J	ug/L		29	10 - 129
Hexachloroethane	30.0	12.4		ug/L		41	41 - 120
Indene	30.0	16.8		ug/L		56	47 - 120
Isophorone	30.0	16.3		ug/L		54	49 - 120
2-Methylphenol	30.0	17.6		ug/L		59	39 - 123
3 & 4 Methylphenol	30.0	17.6	J	ug/L		59	38 - 121
2-Nitroaniline	30.0	18.9		ug/L		63	47 - 150
3-Nitroaniline	30.0	21.4		ug/L		71	34 - 132
4-Nitroaniline	30.0	29.8		ug/L		99	41 - 135
Nitrobenzene	30.0	16.1		ug/L		54	47 - 120
2-Nitrophenol	30.0	18.3		ug/L		61	28 - 136
4-Nitrophenol	60.0	41.0		ug/L		68	10 - 150
N-Nitrosodimethylamine	30.0	21.2		ug/L		71	22 - 148
N-Nitrosodi-n-propylamine	30.0	18.5		ug/L		62	44 - 120
N-Nitrosodiphenylamine	29.8	22.0		ug/L		74	56 - 120
Pentachlorophenol	60.0	51.6		ug/L		86	15 - 141
Phenol	30.0	13.6		ug/L		45	33 - 120
Pyridine	60.0	27.2		ug/L		45	26 - 120

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

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	18.3		ug/L		61	51 - 129
2,4,5-Trichlorophenol	30.0	23.6		ug/L		79	38 - 147
2,4,6-Trichlorophenol	30.0	23.2		ug/L		77	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*106*		*15 - 135*

Lab Sample ID: LCS 400-448615/4-A
Matrix: Water
Analysis Batch: 448802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	12.9		ug/L		43	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*44*		*34 - 120*
2-Fluorophenol	*41*		*10 - 120*
Nitrobenzene-d5	*62*		*27 - 120*
Phenol-d5	*44*		*10 - 120*
Terphenyl-d14	*55*		*53 - 125*
2,4,6-Tribromophenol	*47*		*15 - 135*

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	14.5		ug/L		48	29 - 120	7	30
Benzoic acid	117	25.9	J	ug/L		22	10 - 150	4	30
Benzyl alcohol	30.0	17.2		ug/L		57	19 - 125	1	30
Bis(2-chloroethoxy)methane	30.0	15.1		ug/L		50	45 - 120	0	30
Bis(2-chloroethyl)ether	30.0	14.4		ug/L		48	48 - 120	4	30
bis (2-chloroisopropyl) ether	30.0	13.3		ug/L		44	30 - 125	4	30
Bis(2-ethylhexyl) phthalate	30.0	19.0		ug/L		63	48 - 150	7	30
4-Bromophenyl phenyl ether	30.0	25.4		ug/L		85	55 - 122	7	30
Butyl benzyl phthalate	30.0	14.4		ug/L		48	46 - 145	8	30
4-Chloroaniline	30.0	13.7		ug/L		46	30 - 120	1	30
4-Chloro-3-methylphenol	30.0	19.2		ug/L		64	39 - 140	3	30
2-Chloronaphthalene	30.0	19.5		ug/L		65	52 - 120	0	30
2-Chlorophenol	30.0	17.2		ug/L		57	34 - 120	2	30
4-Chlorophenyl phenyl ether	30.0	23.4		ug/L		78	58 - 124	2	30
Dibenz[a,h]acridine	30.0	21.4		ug/L		71	46 - 149	5	30
Dibenzofuran	30.0	20.4		ug/L		68	58 - 123	3	30

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

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	55.3	*	ug/L		138	39 - 135	4	30
2,4-Dichlorophenol	30.0	20.4		ug/L		68	39 - 128	1	30
Diethyl phthalate	30.0	21.4		ug/L		71	44 - 146	5	30
2,4-Dimethylphenol	30.0	18.7		ug/L		62	44 - 120	3	30
Dimethyl phthalate	30.0	21.0		ug/L		70	50 - 131	5	30
Di-n-butyl phthalate	30.0	19.7		ug/L		66	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	48.2		ug/L		80	10 - 150	2	30
2,4-Dinitrophenol	60.0	63.6		ug/L		106	10 - 150	5	30
2,4-Dinitrotoluene	30.0	22.3		ug/L		74	58 - 140	5	30
2,6-Dinitrotoluene	30.0	22.5		ug/L		75	57 - 130	3	30
Di-n-octyl phthalate	30.0	18.7		ug/L		62	50 - 150	6	30
1,4-Dioxane	30.0	10.9		ug/L		36	25 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	15.6		ug/L		52	47 - 123	2	30
Hexachlorobenzene	30.0	28.0		ug/L		93	52 - 131	6	30
Hexachlorocyclopentadiene	30.0	8.83	J	ug/L		29	10 - 129	3	30
Hexachloroethane	30.0	11.9	*	ug/L		40	41 - 120	4	30
Indene	30.0	15.9		ug/L		53	47 - 120	5	30
Isophorone	30.0	16.3		ug/L		54	49 - 120	0	30
2-Methylphenol	30.0	16.6		ug/L		55	39 - 123	6	30
3 & 4 Methylphenol	30.0	16.9	J	ug/L		56	38 - 121	4	30
2-Nitroaniline	30.0	18.1		ug/L		60	47 - 150	4	30
3-Nitroaniline	30.0	20.0		ug/L		67	34 - 132	7	30
4-Nitroaniline	30.0	28.3		ug/L		94	41 - 135	5	30
Nitrobenzene	30.0	16.5		ug/L		55	47 - 120	2	30
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136	0	30
4-Nitrophenol	60.0	40.5		ug/L		67	10 - 150	1	30
N-Nitrosodimethylamine	30.0	18.9		ug/L		63	22 - 148	12	30
N-Nitrosodi-n-propylamine	30.0	17.9		ug/L		60	44 - 120	3	30
N-Nitrosodiphenylamine	29.8	20.6		ug/L		69	56 - 120	6	30
Pentachlorophenol	60.0	49.7		ug/L		83	15 - 141	4	30
Phenol	30.0	13.3		ug/L		44	33 - 120	2	30
Pyridine	60.0	26.4		ug/L		44	26 - 120	3	30
Quinoline	30.0	19.3		ug/L		64	51 - 129	5	30
2,4,5-Trichlorophenol	30.0	22.8		ug/L		76	38 - 147	3	30
2,4,6-Trichlorophenol	30.0	22.2		ug/L		74	36 - 139	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*57*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*46*		*27 - 120*
Phenol-d5	*39*		*10 - 120*
Terphenyl-d14	*62*		*53 - 125*
2,4,6-Tribromophenol	*90*		*15 - 135*

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

Lab Sample ID: LCSD 400-448615/5-A
Matrix: Water
Analysis Batch: 448802

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol			30.0	ND	*	ug/L		4	10 - 120	165	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*46*		*34 - 120*
2-Fluorophenol	*41*		*10 - 120*
Nitrobenzene-d5	*66*		*27 - 120*
Phenol-d5	*53*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

Lab Sample ID: MB 400-449437/1-A
Matrix: Water
Analysis Batch: 450063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/24/19 21:29	07/30/19 21:00	1
Benzenethiol	ND		10	1.7	ug/L		07/24/19 21:29	07/30/19 21:00	1
Benzoic acid	ND		30	7.3	ug/L		07/24/19 21:29	07/30/19 21:00	1
Benzyl alcohol	ND		10	2.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/24/19 21:29	07/30/19 21:00	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/24/19 21:29	07/30/19 21:00	1
4-Chloroaniline	ND		10	3.4	ug/L		07/24/19 21:29	07/30/19 21:00	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/24/19 21:29	07/30/19 21:00	1
2-Chlorophenol	ND		10	2.2	ug/L		07/24/19 21:29	07/30/19 21:00	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/24/19 21:29	07/30/19 21:00	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
Diethyl phthalate	ND		10	0.70	ug/L		07/24/19 21:29	07/30/19 21:00	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/24/19 21:29	07/30/19 21:00	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/24/19 21:29	07/30/19 21:00	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/24/19 21:29	07/30/19 21:00	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/24/19 21:29	07/30/19 21:00	1
1,4-Dioxane	ND		10	1.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
Hexachloroethane	ND		10	4.2	ug/L		07/24/19 21:29	07/30/19 21:00	1
Indene	ND		10	1.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
Isophorone	ND		10	0.57	ug/L		07/24/19 21:29	07/30/19 21:00	1
2-Methylphenol	ND		10	1.8	ug/L		07/24/19 21:29	07/30/19 21:00	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/24/19 21:29	07/30/19 21:00	1
2-Nitroaniline	ND		10	2.2	ug/L		07/24/19 21:29	07/30/19 21:00	1
3-Nitroaniline	ND		10	1.8	ug/L		07/24/19 21:29	07/30/19 21:00	1
4-Nitroaniline	ND		10	2.5	ug/L		07/24/19 21:29	07/30/19 21:00	1
Nitrobenzene	ND		10	0.55	ug/L		07/24/19 21:29	07/30/19 21:00	1
2-Nitrophenol	ND		10	0.65	ug/L		07/24/19 21:29	07/30/19 21:00	1
4-Nitrophenol	ND		10	2.1	ug/L		07/24/19 21:29	07/30/19 21:00	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/24/19 21:29	07/30/19 21:00	1

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

Lab Sample ID: MB 400-449437/1-A
Matrix: Water
Analysis Batch: 450063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/24/19 21:29	07/30/19 21:00	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/24/19 21:29	07/30/19 21:00	1
Pentachlorophenol	ND		20	1.8	ug/L		07/24/19 21:29	07/30/19 21:00	1
Phenol	ND		10	2.6	ug/L		07/24/19 21:29	07/30/19 21:00	1
Pyridine	ND		10	3.2	ug/L		07/24/19 21:29	07/30/19 21:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*		*34 - 120*	*07/24/19 21:29*	*07/30/19 21:00*	*1*
2-Fluorophenol	*53*		*10 - 120*	*07/24/19 21:29*	*07/30/19 21:00*	*1*
Nitrobenzene-d5	*82*		*27 - 120*	*07/24/19 21:29*	*07/30/19 21:00*	*1*
Phenol-d5	*70*		*10 - 120*	*07/24/19 21:29*	*07/30/19 21:00*	*1*
Terphenyl-d14	*70*		*53 - 125*	*07/24/19 21:29*	*07/30/19 21:00*	*1*
2,4,6-Tribromophenol	*35*		*15 - 135*	*07/24/19 21:29*	*07/30/19 21:00*	*1*

Lab Sample ID: MB 400-449437/1-A
Matrix: Water
Analysis Batch: 450467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/24/19 21:29	08/01/19 20:36	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/24/19 21:29	08/01/19 20:36	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/24/19 21:29	08/01/19 20:36	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/24/19 21:29	08/01/19 20:36	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/24/19 21:29	08/01/19 20:36	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/24/19 21:29	08/01/19 20:36	1
Dibenzofuran	ND		10	0.52	ug/L		07/24/19 21:29	08/01/19 20:36	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/24/19 21:29	08/01/19 20:36	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/24/19 21:29	08/01/19 20:36	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/24/19 21:29	08/01/19 20:36	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/24/19 21:29	08/01/19 20:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/24/19 21:29	08/01/19 20:36	1
Quinoline	ND		10	6.0	ug/L		07/24/19 21:29	08/01/19 20:36	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/24/19 21:29	08/01/19 20:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/19 21:29	08/01/19 20:36	1

Lab Sample ID: LCS 400-449437/2-A
Matrix: Water
Analysis Batch: 450762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	29.3		ug/L		98	29 - 120
Benzoic acid	117	97.7		ug/L		84	10 - 150
Benzyl alcohol	30.0	31.4		ug/L		105	19 - 125
Bis(2-chloroethoxy)methane	30.0	29.9		ug/L		100	45 - 120
Bis(2-chloroethyl)ether	30.0	31.5		ug/L		105	48 - 120
bis (2-chloroisopropyl) ether	30.0	29.8		ug/L		99	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	29.8		ug/L		99	48 - 150
4-Bromophenyl phenyl ether	30.0	30.5		ug/L		102	55 - 122
Butyl benzyl phthalate	30.0	32.3		ug/L		108	46 - 145

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

Lab Sample ID: LCS 400-449437/2-A
Matrix: Water
Analysis Batch: 450762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	30.0	26.7		ug/L		89	30 - 120
4-Chloro-3-methylphenol	30.0	31.2		ug/L		104	39 - 140
2-Chloronaphthalene	30.0	31.2		ug/L		104	52 - 120
2-Chlorophenol	30.0	28.0		ug/L		93	34 - 120
4-Chlorophenyl phenyl ether	30.0	31.7		ug/L		106	58 - 124
Dibenz[a,h]acridine	30.0	29.5		ug/L		98	46 - 149
Dibenzofuran	30.0	32.1		ug/L		107	58 - 123
3,3'-Dichlorobenzidine	40.0	53.6		ug/L		134	39 - 135
2,4-Dichlorophenol	30.0	30.4		ug/L		101	39 - 128
Diethyl phthalate	30.0	34.4		ug/L		115	44 - 146
2,4-Dimethylphenol	30.0	30.3		ug/L		101	44 - 120
Dimethyl phthalate	30.0	32.5		ug/L		108	50 - 131
Di-n-butyl phthalate	30.0	34.0		ug/L		113	55 - 131
4,6-Dinitro-ortho-cresol	60.0	64.8		ug/L		108	10 - 150
2,4-Dinitrophenol	60.0	67.6		ug/L		113	10 - 150
2,4-Dinitrotoluene	30.0	37.0		ug/L		123	58 - 140
2,6-Dinitrotoluene	30.0	32.0		ug/L		107	57 - 130
Di-n-octyl phthalate	30.0	30.0	B	ug/L		100	50 - 150
1,4-Dioxane	30.0	20.4		ug/L		68	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	29.8		ug/L		99	47 - 123
Hexachlorobenzene	30.0	30.8		ug/L		103	52 - 131
Hexachlorocyclopentadiene	30.0	13.0	J	ug/L		43	10 - 129
Hexachloroethane	30.0	20.6		ug/L		69	41 - 120
Indene	30.0	28.1		ug/L		94	47 - 120
Isophorone	30.0	30.2		ug/L		101	49 - 120
2-Methylphenol	30.0	31.0		ug/L		103	39 - 123
3 & 4 Methylphenol	30.0	31.2		ug/L		104	38 - 121
2-Nitroaniline	30.0	30.3		ug/L		101	47 - 150
3-Nitroaniline	30.0	28.5		ug/L		95	34 - 132
4-Nitroaniline	30.0	35.2		ug/L		117	41 - 135
Nitrobenzene	30.0	28.0		ug/L		93	47 - 120
2-Nitrophenol	30.0	30.0		ug/L		100	28 - 136
4-Nitrophenol	60.0	63.5		ug/L		106	10 - 150
N-Nitrosodimethylamine	30.0	29.2		ug/L		97	22 - 148
N-Nitrosodi-n-propylamine	30.0	32.7		ug/L		109	44 - 120
N-Nitrosodiphenylamine	29.8	31.0		ug/L		104	56 - 120
Pentachlorophenol	60.0	66.2		ug/L		110	15 - 141
Phenol	30.0	28.4		ug/L		95	33 - 120
Pyridine	60.0	51.7		ug/L		86	26 - 120
Quinoline	30.0	35.2		ug/L		117	51 - 129
2,4,5-Trichlorophenol	30.0	33.4		ug/L		111	38 - 147
2,4,6-Trichlorophenol	30.0	32.9		ug/L		110	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*34 - 120*
2-Fluorophenol	*74*		*10 - 120*
Nitrobenzene-d5	*100*		*27 - 120*

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

Lab Sample ID: LCS 400-449437/2-A
Matrix: Water
Analysis Batch: 450762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449437

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Phenol-d5	*95*		*10 - 120*
Terphenyl-d14	*115*		*53 - 125*
2,4,6-Tribromophenol	*112*		*15 - 135*

Lab Sample ID: LCS 400-449437/4-A
Matrix: Water
Analysis Batch: 450063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449437

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	*45*		*34 - 120*
2-Fluorophenol	*40*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*60*		*10 - 120*
Terphenyl-d14	*66*		*53 - 125*
2,4,6-Tribromophenol	*25*		*15 - 135*

Lab Sample ID: LCSD 400-449437/3-A
Matrix: Water
Analysis Batch: 450762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	24.8		ug/L		83	29 - 120	17	30
Benzoic acid	117	92.4		ug/L		79	10 - 150	6	30
Benzyl alcohol	30.0	31.2		ug/L		104	19 - 125	1	30
Bis(2-chloroethoxy)methane	30.0	29.8		ug/L		99	45 - 120	0	30
Bis(2-chloroethyl)ether	30.0	28.4		ug/L		95	48 - 120	10	30
bis (2-chloroisopropyl) ether	30.0	29.3		ug/L		98	30 - 125	2	30
Bis(2-ethylhexyl) phthalate	30.0	30.2		ug/L		101	48 - 150	1	30
4-Bromophenyl phenyl ether	30.0	29.6		ug/L		99	55 - 122	3	30
Butyl benzyl phthalate	30.0	32.0		ug/L		107	46 - 145	1	30
4-Chloroaniline	30.0	25.5		ug/L		85	30 - 120	4	30
4-Chloro-3-methylphenol	30.0	30.4		ug/L		101	39 - 140	3	30
2-Chloronaphthalene	30.0	31.1		ug/L		104	52 - 120	0	30
2-Chlorophenol	30.0	29.1		ug/L		97	34 - 120	4	30
4-Chlorophenyl phenyl ether	30.0	32.3		ug/L		108	58 - 124	2	30
Dibenz[a,h]acridine	30.0	32.1		ug/L		107	46 - 149	9	30
Dibenzofuran	30.0	32.0		ug/L		107	58 - 123	0	30
3,3'-Dichlorobenzidine	40.0	51.6		ug/L		129	39 - 135	4	30
2,4-Dichlorophenol	30.0	29.5		ug/L		98	39 - 128	3	30
Diethyl phthalate	30.0	34.3		ug/L		114	44 - 146	0	30
2,4-Dimethylphenol	30.0	29.8		ug/L		99	44 - 120	2	30
Dimethyl phthalate	30.0	32.0		ug/L		107	50 - 131	2	30
Di-n-butyl phthalate	30.0	34.3		ug/L		114	55 - 131	1	30
4,6-Dinitro-ortho-cresol	60.0	69.4		ug/L		116	10 - 150	7	30
2,4-Dinitrophenol	60.0	71.6		ug/L		119	10 - 150	6	30

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

Lab Sample ID: LCSD 400-449437/3-A
Matrix: Water
Analysis Batch: 450762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	30.0	36.9		ug/L		123	58 - 140	0	30
2,6-Dinitrotoluene	30.0	31.8		ug/L		106	57 - 130	1	30
Di-n-octyl phthalate	30.0	30.6	B	ug/L		102	50 - 150	2	30
1,4-Dioxane	30.0	20.6		ug/L		69	25 - 120	1	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	29.2		ug/L		97	47 - 123	2	30
Hexachlorobenzene	30.0	31.7		ug/L		106	52 - 131	3	30
Hexachlorocyclopentadiene	30.0	12.9	J	ug/L		43	10 - 129	1	30
Hexachloroethane	30.0	21.4		ug/L		71	41 - 120	4	30
Indene	30.0	28.2		ug/L		94	47 - 120	0	30
Isophorone	30.0	29.7		ug/L		99	49 - 120	2	30
2-Methylphenol	30.0	30.5		ug/L		102	39 - 123	1	30
3 & 4 Methylphenol	30.0	31.0		ug/L		103	38 - 121	1	30
2-Nitroaniline	30.0	30.2		ug/L		101	47 - 150	0	30
3-Nitroaniline	30.0	28.3		ug/L		94	34 - 132	0	30
4-Nitroaniline	30.0	36.3		ug/L		121	41 - 135	3	30
Nitrobenzene	30.0	27.8		ug/L		93	47 - 120	1	30
2-Nitrophenol	30.0	30.2		ug/L		101	28 - 136	1	30
4-Nitrophenol	60.0	62.1		ug/L		104	10 - 150	2	30
N-Nitrosodimethylamine	30.0	28.2		ug/L		94	22 - 148	4	30
N-Nitrosodi-n-propylamine	30.0	32.8		ug/L		109	44 - 120	0	30
N-Nitrosodiphenylamine	29.8	30.3		ug/L		102	56 - 120	2	30
Pentachlorophenol	60.0	66.0		ug/L		110	15 - 141	0	30
Phenol	30.0	27.6		ug/L		92	33 - 120	3	30
Pyridine	60.0	49.8		ug/L		83	26 - 120	4	30
Quinoline	30.0	34.0		ug/L		113	51 - 129	3	30
2,4,5-Trichlorophenol	30.0	32.7		ug/L		109	38 - 147	2	30
2,4,6-Trichlorophenol	30.0	32.9		ug/L		110	36 - 139	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*34 - 120*
2-Fluorophenol	*79*		*10 - 120*
Nitrobenzene-d5	*99*		*27 - 120*
Phenol-d5	*92*		*10 - 120*
Terphenyl-d14	*107*		*53 - 125*
2,4,6-Tribromophenol	*107*		*15 - 135*

Lab Sample ID: LCSD 400-449437/5-A
Matrix: Water
Analysis Batch: 450063

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	14.9	*	ug/L		50	10 - 120	178	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*44*		*34 - 120*
2-Fluorophenol	*45*		*10 - 120*
Nitrobenzene-d5	*81*		*27 - 120*

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

Lab Sample ID: LCSD 400-449437/5-A
Matrix: Water
Analysis Batch: 450063

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449437

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*67*		*53 - 125*
2,4,6-Tribromophenol	*34*		*15 - 135*

Lab Sample ID: MB 400-449448/1-A
Matrix: Water
Analysis Batch: 450054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND		10	1.7	ug/L		07/25/19 08:28	07/30/19 22:58	1
Benzoic acid	ND		30	7.3	ug/L		07/25/19 08:28	07/30/19 22:58	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/25/19 08:28	07/30/19 22:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
4-Chloroaniline	ND		10	3.4	ug/L		07/25/19 08:28	07/30/19 22:58	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/25/19 08:28	07/30/19 22:58	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/25/19 08:28	07/30/19 22:58	1
2-Chlorophenol	ND		10	2.2	ug/L		07/25/19 08:28	07/30/19 22:58	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
Dibenzofuran	ND		10	0.52	ug/L		07/25/19 08:28	07/30/19 22:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
Diethyl phthalate	ND		10	0.70	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/25/19 08:28	07/30/19 22:58	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/25/19 08:28	07/30/19 22:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/25/19 08:28	07/30/19 22:58	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/25/19 08:28	07/30/19 22:58	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/25/19 08:28	07/30/19 22:58	1
1,4-Dioxane	ND		10	1.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/25/19 08:28	07/30/19 22:58	1
Hexachloroethane	ND		10	4.2	ug/L		07/25/19 08:28	07/30/19 22:58	1
Indene	ND		10	1.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
2-Nitroaniline	ND		10	2.2	ug/L		07/25/19 08:28	07/30/19 22:58	1
3-Nitroaniline	ND		10	1.8	ug/L		07/25/19 08:28	07/30/19 22:58	1
4-Nitroaniline	ND		10	2.5	ug/L		07/25/19 08:28	07/30/19 22:58	1
Nitrobenzene	ND		10	0.55	ug/L		07/25/19 08:28	07/30/19 22:58	1
2-Nitrophenol	ND		10	0.65	ug/L		07/25/19 08:28	07/30/19 22:58	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/25/19 08:28	07/30/19 22:58	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/25/19 08:28	07/30/19 22:58	1
Pentachlorophenol	ND		20	1.8	ug/L		07/25/19 08:28	07/30/19 22:58	1
Quinoline	ND		10	6.0	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/25/19 08:28	07/30/19 22:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/25/19 08:28	07/30/19 22:58	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		34 - 120	07/25/19 08:28	07/30/19 22:58	1
2-Fluorophenol	35		10 - 120	07/25/19 08:28	07/30/19 22:58	1
Nitrobenzene-d5	54		27 - 120	07/25/19 08:28	07/30/19 22:58	1
Phenol-d5	44		10 - 120	07/25/19 08:28	07/30/19 22:58	1
Terphenyl-d14	84		53 - 125	07/25/19 08:28	07/30/19 22:58	1
2,4,6-Tribromophenol	81		15 - 135	07/25/19 08:28	07/30/19 22:58	1

Lab Sample ID: MB 400-449448/1-A
Matrix: Water
Analysis Batch: 450467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/25/19 08:28	08/02/19 00:51	1
Benzyl alcohol	ND		10	2.0	ug/L		07/25/19 08:28	08/02/19 00:51	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/25/19 08:28	08/02/19 00:51	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/25/19 08:28	08/02/19 00:51	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/25/19 08:28	08/02/19 00:51	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/25/19 08:28	08/02/19 00:51	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/25/19 08:28	08/02/19 00:51	1
Isophorone	ND		10	0.57	ug/L		07/25/19 08:28	08/02/19 00:51	1
2-Methylphenol	ND		10	1.8	ug/L		07/25/19 08:28	08/02/19 00:51	1
4-Nitrophenol	ND		10	2.1	ug/L		07/25/19 08:28	08/02/19 00:51	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/25/19 08:28	08/02/19 00:51	1
Phenol	ND		10	2.6	ug/L		07/25/19 08:28	08/02/19 00:51	1
Pyridine	ND		10	3.2	ug/L		07/25/19 08:28	08/02/19 00:51	1

Lab Sample ID: LCS 400-449448/20-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	24.0		ug/L		80	29 - 120
Benzoic acid	117	35.1		ug/L		30	10 - 150
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.6		ug/L		55	45 - 120
Bis(2-chloroethyl)ether	30.0	16.0		ug/L		53	48 - 120
bis (2-chloroisopropyl) ether	30.0	15.2		ug/L		51	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	18.8		ug/L		63	48 - 150
4-Bromophenyl phenyl ether	30.0	18.5		ug/L		62	55 - 122
Butyl benzyl phthalate	30.0	17.4		ug/L		58	46 - 145
4-Chloroaniline	30.0	22.5		ug/L		75	30 - 120
4-Chloro-3-methylphenol	30.0	18.4		ug/L		61	39 - 140
2-Chloronaphthalene	30.0	15.8		ug/L		53	52 - 120
2-Chlorophenol	30.0	17.0		ug/L		57	34 - 120
4-Chlorophenyl phenyl ether	30.0	17.7		ug/L		59	58 - 124
Dibenz[a,h]acridine	30.0	17.2		ug/L		57	46 - 149
Dibenzofuran	30.0	17.3		ug/L		58	58 - 123
3,3'-Dichlorobenzidine	40.0	38.7		ug/L		97	39 - 135
2,4-Dichlorophenol	30.0	19.8		ug/L		66	39 - 128
Diethyl phthalate	30.0	22.4		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	22.3		ug/L		74	44 - 120
Dimethyl phthalate	30.0	18.1		ug/L		60	50 - 131

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

Lab Sample ID: LCS 400-449448/20-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-butyl phthalate	30.0	21.3		ug/L		71	55 - 131
4,6-Dinitro-ortho-cresol	60.0	50.2		ug/L		84	10 - 150
2,4-Dinitrophenol	60.0	60.7		ug/L		101	10 - 150
2,4-Dinitrotoluene	30.0	16.9	*	ug/L		56	58 - 140
2,6-Dinitrotoluene	30.0	16.4	*	ug/L		55	57 - 130
Di-n-octyl phthalate	30.0	18.6		ug/L		62	50 - 150
1,4-Dioxane	30.0	14.0		ug/L		47	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	21.1		ug/L		70	47 - 123
Hexachlorobenzene	30.0	22.7		ug/L		76	52 - 131
Hexachlorocyclopentadiene	30.0	10.8	J	ug/L		36	10 - 129
Hexachloroethane	30.0	14.8		ug/L		49	41 - 120
Indene	30.0	19.7		ug/L		66	47 - 120
Isophorone	30.0	19.9		ug/L		66	49 - 120
2-Methylphenol	30.0	22.0		ug/L		73	39 - 123
3 & 4 Methylphenol	30.0	23.6		ug/L		79	38 - 121
2-Nitroaniline	30.0	22.8		ug/L		76	47 - 150
3-Nitroaniline	30.0	23.0		ug/L		77	34 - 132
4-Nitroaniline	30.0	21.8		ug/L		73	41 - 135
Nitrobenzene	30.0	21.0		ug/L		70	47 - 120
2-Nitrophenol	30.0	19.2		ug/L		64	28 - 136
4-Nitrophenol	60.0	51.7		ug/L		86	10 - 150
N-Nitrosodimethylamine	30.0	24.9		ug/L		83	22 - 148
N-Nitrosodi-n-propylamine	30.0	27.9		ug/L		93	44 - 120
N-Nitrosodiphenylamine	29.8	17.9		ug/L		60	56 - 120
Pentachlorophenol	60.0	40.8		ug/L		68	15 - 141
Phenol	30.0	17.5		ug/L		58	33 - 120
Pyridine	60.0	32.5		ug/L		54	26 - 120
Quinoline	30.0	18.8		ug/L		63	51 - 129
2,4,5-Trichlorophenol	30.0	18.7		ug/L		62	38 - 147
2,4,6-Trichlorophenol	30.0	19.4		ug/L		65	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*34 - 120*
2-Fluorophenol	*45*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*69*		*53 - 125*
2,4,6-Tribromophenol	*67*		*15 - 135*

Lab Sample ID: LCSD 400-449448/21-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449448

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	29.2		ug/L		97	29 - 120	19	30
Benzoic acid	117	48.9	*	ug/L		42	10 - 150	33	30
Benzyl alcohol	30.0	27.9		ug/L		93	19 - 125	12	30
Bis(2-chloroethoxy)methane	30.0	18.5		ug/L		62	45 - 120	11	30

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

Lab Sample ID: LCSD 400-449448/21-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449448

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	30.0	16.1		ug/L		54	48 - 120	1	30
bis (2-chloroisopropyl) ether	30.0	17.7		ug/L		59	30 - 125	15	30
Bis(2-ethylhexyl) phthalate	30.0	23.5		ug/L		78	48 - 150	22	30
4-Bromophenyl phenyl ether	30.0	22.5		ug/L		75	55 - 122	19	30
Butyl benzyl phthalate	30.0	20.9		ug/L		70	46 - 145	18	30
4-Chloroaniline	30.0	25.2		ug/L		84	30 - 120	11	30
4-Chloro-3-methylphenol	30.0	20.6		ug/L		69	39 - 140	11	30
2-Chloronaphthalene	30.0	18.3		ug/L		61	52 - 120	15	30
2-Chlorophenol	30.0	20.0		ug/L		67	34 - 120	16	30
4-Chlorophenyl phenyl ether	30.0	20.7		ug/L		69	58 - 124	16	30
Dibenz[a,h]acridine	30.0	19.3		ug/L		64	46 - 149	11	30
Dibenzofuran	30.0	20.4		ug/L		68	58 - 123	16	30
3,3'-Dichlorobenzidine	40.0	42.0		ug/L		105	39 - 135	8	30
2,4-Dichlorophenol	30.0	23.4		ug/L		78	39 - 128	16	30
Diethyl phthalate	30.0	26.1		ug/L		87	44 - 146	16	30
2,4-Dimethylphenol	30.0	26.3		ug/L		88	44 - 120	17	30
Dimethyl phthalate	30.0	21.5		ug/L		72	50 - 131	17	30
Di-n-butyl phthalate	30.0	24.3		ug/L		81	55 - 131	14	30
4,6-Dinitro-ortho-cresol	60.0	58.1		ug/L		97	10 - 150	15	30
2,4-Dinitrophenol	60.0	67.5		ug/L		112	10 - 150	11	30
2,4-Dinitrotoluene	30.0	20.0		ug/L		67	58 - 140	17	30
2,6-Dinitrotoluene	30.0	19.9		ug/L		66	57 - 130	19	30
Di-n-octyl phthalate	30.0	21.7		ug/L		72	50 - 150	16	30
1,4-Dioxane	30.0	16.4		ug/L		55	25 - 120	15	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.4		ug/L		85	47 - 123	19	30
Hexachlorobenzene	30.0	27.3		ug/L		91	52 - 131	18	30
Hexachlorocyclopentadiene	30.0	11.6	J	ug/L		39	10 - 129	7	30
Hexachloroethane	30.0	16.4		ug/L		55	41 - 120	10	30
Indene	30.0	19.5		ug/L		65	47 - 120	1	30
Isophorone	30.0	21.9		ug/L		73	49 - 120	9	30
2-Methylphenol	30.0	25.7		ug/L		86	39 - 123	16	30
3 & 4 Methylphenol	30.0	28.1		ug/L		94	38 - 121	18	30
2-Nitroaniline	30.0	27.4		ug/L		91	47 - 150	18	30
3-Nitroaniline	30.0	26.9		ug/L		90	34 - 132	16	30
4-Nitroaniline	30.0	25.9		ug/L		86	41 - 135	17	30
Nitrobenzene	30.0	23.3		ug/L		78	47 - 120	10	30
2-Nitrophenol	30.0	22.6		ug/L		75	28 - 136	16	30
4-Nitrophenol	60.0	56.5		ug/L		94	10 - 150	9	30
N-Nitrosodimethylamine	30.0	29.0		ug/L		97	22 - 148	15	30
N-Nitrosodi-n-propylamine	30.0	31.7		ug/L		106	44 - 120	13	30
N-Nitrosodiphenylamine	29.8	22.4		ug/L		75	56 - 120	22	30
Pentachlorophenol	60.0	48.6		ug/L		81	15 - 141	17	30
Phenol	30.0	20.3		ug/L		68	33 - 120	15	30
Pyridine	60.0	39.3		ug/L		66	26 - 120	19	30
Quinoline	30.0	22.8		ug/L		76	51 - 129	19	30
2,4,5-Trichlorophenol	30.0	22.4		ug/L		75	38 - 147	18	30
2,4,6-Trichlorophenol	30.0	23.5		ug/L		78	36 - 139	19	30

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

Lab Sample ID: LCSD 400-449448/21-A
Matrix: Water
Analysis Batch: 450203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449448

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	60		34 - 120
2-Fluorophenol	48		10 - 120
Nitrobenzene-d5	81		27 - 120
Phenol-d5	70		10 - 120
Terphenyl-d14	77		53 - 125
2,4,6-Tribromophenol	71		15 - 135

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

Lab Sample ID: MB 400-448434/1-A
Matrix: Water
Analysis Batch: 450159

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
Anthracene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Chrysene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Fluoranthene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
Fluorene	ND		0.20	0.021	ug/L		07/17/19 14:25	07/31/19 12:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/17/19 14:25	07/31/19 12:39	1
Phenanthrene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
Pyrene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/17/19 14:25	07/31/19 12:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	120		33 - 138	07/17/19 14:25	07/31/19 12:39	1
2-Fluorobiphenyl	108		15 - 122	07/17/19 14:25	07/31/19 12:39	1
Nitrobenzene-d5	102		19 - 130	07/17/19 14:25	07/31/19 12:39	1

Lab Sample ID: LCS 400-448434/2-A
Matrix: Water
Analysis Batch: 450159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448434

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	25.7		ug/L		86	44 - 120
Anthracene	30.0	27.0		ug/L		90	49 - 120
Benzo[a]anthracene	30.0	25.3		ug/L		84	61 - 135
Benzo[a]pyrene	30.0	24.5		ug/L		82	52 - 120
Benzo[b]fluoranthene	30.0	26.5		ug/L		88	53 - 134

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

Lab Sample ID: LCS 400-448434/2-A
Matrix: Water
Analysis Batch: 450159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	30.0	21.3		ug/L		71	47 - 133
Benzo[k]fluoranthene	30.0	22.2		ug/L		74	57 - 134
Chrysene	30.0	25.9		ug/L		86	55 - 122
Dibenz(a,h)anthracene	30.0	20.4		ug/L		68	48 - 146
Fluoranthene	30.0	28.8		ug/L		96	54 - 128
Fluorene	30.0	27.8		ug/L		93	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	21.8		ug/L		73	43 - 142
Phenanthrene	30.0	27.4		ug/L		91	48 - 120
Pyrene	30.0	31.6		ug/L		105	48 - 132
1-Methylnaphthalene	30.0	19.8		ug/L		66	41 - 120
2-Methylnaphthalene	30.0	20.1		ug/L		67	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*104*		*33 - 138*
2-Fluorobiphenyl	*73*		*15 - 122*
Nitrobenzene-d5	*75*		*19 - 130*

Lab Sample ID: LCSD 400-448434/3-A
Matrix: Water
Analysis Batch: 450159

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.3		ug/L		91	41 - 120	10	56
Acenaphthylene	30.0	27.8		ug/L		93	44 - 120	8	56
Anthracene	30.0	27.3		ug/L		91	49 - 120	1	51
Benzo[a]anthracene	30.0	26.4		ug/L		88	61 - 135	4	49
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120	7	50
Benzo[b]fluoranthene	30.0	29.1		ug/L		97	53 - 134	9	54
Benzo[g,h,i]perylene	30.0	24.0		ug/L		80	47 - 133	12	50
Benzo[k]fluoranthene	30.0	25.6		ug/L		85	57 - 134	14	52
Chrysene	30.0	26.8		ug/L		89	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	21.7		ug/L		72	48 - 146	6	50
Fluoranthene	30.0	30.1		ug/L		100	54 - 128	5	52
Fluorene	30.0	30.7		ug/L		102	45 - 125	10	56
Indeno[1,2,3-cd]pyrene	30.0	23.3		ug/L		78	43 - 142	7	51
Phenanthrene	30.0	28.7		ug/L		96	48 - 120	5	56
Pyrene	30.0	28.7		ug/L		96	48 - 132	9	52
1-Methylnaphthalene	30.0	21.2		ug/L		71	41 - 120	7	55
2-Methylnaphthalene	30.0	21.2		ug/L		71	32 - 124	5	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*75*		*19 - 130*

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Anthracene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Chrysene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Fluoranthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Fluorene	ND		0.20	0.021	ug/L		07/18/19 16:34	07/23/19 16:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Phenanthrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Pyrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*230*	*X*	*33 - 138*	*07/18/19 16:34*	*07/23/19 16:26*	*1*
2-Fluorobiphenyl	*146*	*X*	*15 - 122*	*07/18/19 16:34*	*07/23/19 16:26*	*1*
Nitrobenzene-d5	*115*		*19 - 130*	*07/18/19 16:34*	*07/23/19 16:26*	*1*

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.5		ug/L		85	41 - 120
Acenaphthylene	30.0	24.3		ug/L		81	44 - 120
Anthracene	30.0	24.6		ug/L		82	49 - 120
Benzo[a]anthracene	30.0	22.1		ug/L		74	61 - 135
Benzo[a]pyrene	30.0	23.6		ug/L		79	52 - 120
Benzo[b]fluoranthene	30.0	24.8		ug/L		83	53 - 134
Benzo[g,h,i]perylene	30.0	16.3		ug/L		54	47 - 133
Benzo[k]fluoranthene	30.0	26.6		ug/L		89	57 - 134
Chrysene	30.0	21.5		ug/L		72	55 - 122
Dibenz(a,h)anthracene	30.0	18.9		ug/L		63	48 - 146
Fluoranthene	30.0	22.2		ug/L		74	54 - 128
Fluorene	30.0	30.9		ug/L		103	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	18.2		ug/L		61	43 - 142
Phenanthrene	30.0	25.4		ug/L		85	48 - 120
Pyrene	30.0	27.6		ug/L		92	48 - 132
1-Methylnaphthalene	30.0	17.5		ug/L		58	41 - 120
2-Methylnaphthalene	30.0	17.2		ug/L		57	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*33 - 138*

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

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	69		15 - 122
Nitrobenzene-d5	74		19 - 130

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.8		ug/L		99	41 - 120	15	56
Acenaphthylene	30.0	27.5		ug/L		92	44 - 120	12	56
Anthracene	30.0	29.9		ug/L		100	49 - 120	19	51
Benzo[a]anthracene	30.0	26.7		ug/L		89	61 - 135	19	49
Benzo[a]pyrene	30.0	28.0		ug/L		93	52 - 120	17	50
Benzo[b]fluoranthene	30.0	28.7		ug/L		96	53 - 134	15	54
Benzo[g,h,i]perylene	30.0	17.2		ug/L		57	47 - 133	5	50
Benzo[k]fluoranthene	30.0	34.1		ug/L		114	57 - 134	24	52
Chrysene	30.0	26.7		ug/L		89	55 - 122	22	50
Dibenz(a,h)anthracene	30.0	21.3		ug/L		71	48 - 146	12	50
Fluoranthene	30.0	28.6		ug/L		95	54 - 128	25	52
Fluorene	30.0	35.6		ug/L		119	45 - 125	14	56
Indeno[1,2,3-cd]pyrene	30.0	20.3		ug/L		68	43 - 142	11	51
Phenanthrene	30.0	30.0		ug/L		100	48 - 120	17	56
Pyrene	30.0	32.6		ug/L		109	48 - 132	17	52
1-Methylnaphthalene	30.0	20.2		ug/L		67	41 - 120	14	55
2-Methylnaphthalene	30.0	20.0		ug/L		67	32 - 124	15	57

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	84		33 - 138
2-Fluorobiphenyl	65		15 - 122
Nitrobenzene-d5	57		19 - 130

Lab Sample ID: MB 400-449437/1-A
Matrix: Water
Analysis Batch: 450489

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
Anthracene	ND		0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Chrysene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Fluoranthene	0.0465	J	0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
Fluorene	ND		0.20	0.021	ug/L		07/24/19 21:29	08/01/19 15:26	1

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

Lab Sample ID: MB 400-449437/1-A
Matrix: Water
Analysis Batch: 450489

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/24/19 21:29	08/01/19 15:26	1
Phenanthrene	ND		0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
Pyrene	0.0411	J	0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/24/19 21:29	08/01/19 15:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*111*		*33 - 138*	*07/24/19 21:29*	*08/01/19 15:26*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*07/24/19 21:29*	*08/01/19 15:26*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*07/24/19 21:29*	*08/01/19 15:26*	*1*

Lab Sample ID: LCS 400-449437/2-A
Matrix: Water
Analysis Batch: 450489

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	28.4		ug/L		95	41 - 120
Acenaphthylene	30.0	28.0		ug/L		93	44 - 120
Anthracene	30.0	25.9		ug/L		86	49 - 120
Benzo[a]anthracene	30.0	26.4		ug/L		88	61 - 135
Benzo[a]pyrene	30.0	28.0		ug/L		93	52 - 120
Benzo[b]fluoranthene	30.0	31.3		ug/L		104	53 - 134
Benzo[g,h,i]perylene	30.0	23.7		ug/L		79	47 - 133
Benzo[k]fluoranthene	30.0	27.9		ug/L		93	57 - 134
Chrysene	30.0	26.8		ug/L		89	55 - 122
Dibenz(a,h)anthracene	30.0	22.9		ug/L		76	48 - 146
Fluoranthene	30.0	29.5		ug/L		98	54 - 128
Fluorene	30.0	29.7		ug/L		99	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	23.5		ug/L		78	43 - 142
Phenanthrene	30.0	26.1		ug/L		87	48 - 120
Pyrene	30.0	33.9		ug/L		113	48 - 132
1-Methylnaphthalene	30.0	24.4		ug/L		81	41 - 120
2-Methylnaphthalene	30.0	23.7		ug/L		79	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*33 - 138*
2-Fluorobiphenyl	*84*		*15 - 122*
Nitrobenzene-d5	*83*		*19 - 130*

Lab Sample ID: LCSD 400-449437/3-A
Matrix: Water
Analysis Batch: 450489

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.2		ug/L		97	41 - 120	3	56
Acenaphthylene	30.0	28.6		ug/L		95	44 - 120	2	56
Anthracene	30.0	27.0		ug/L		90	49 - 120	4	51
Benzo[a]anthracene	30.0	26.9		ug/L		90	61 - 135	2	49

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

Lab Sample ID: LCSD 400-449437/3-A
Matrix: Water
Analysis Batch: 450489

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	30.0	29.4		ug/L		98	52 - 120	5	50
Benzo[b]fluoranthene	30.0	30.5		ug/L		102	53 - 134	3	54
Benzo[g,h,i]perylene	30.0	25.8		ug/L		86	47 - 133	8	50
Benzo[k]fluoranthene	30.0	29.5		ug/L		98	57 - 134	6	52
Chrysene	30.0	27.3		ug/L		91	55 - 122	2	50
Dibenz(a,h)anthracene	30.0	26.7		ug/L		89	48 - 146	15	50
Fluoranthene	30.0	29.1		ug/L		97	54 - 128	1	52
Fluorene	30.0	31.2		ug/L		104	45 - 125	5	56
Indeno[1,2,3-cd]pyrene	30.0	27.0		ug/L		90	43 - 142	14	51
Phenanthrene	30.0	25.8		ug/L		86	48 - 120	1	56
Pyrene	30.0	30.2		ug/L		101	48 - 132	12	52
1-Methylnaphthalene	30.0	23.9		ug/L		80	41 - 120	2	55
2-Methylnaphthalene	30.0	24.6		ug/L		82	32 - 124	4	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*84*		*33 - 138*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*86*		*19 - 130*

Lab Sample ID: MB 400-449448/1-A
Matrix: Water
Analysis Batch: 450731

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
Anthracene	ND		0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Chrysene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Fluoranthene	ND		0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
Fluorene	ND		0.20	0.021	ug/L		07/25/19 08:28	08/02/19 18:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/25/19 08:28	08/02/19 18:25	1
Phenanthrene	ND		0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
Pyrene	ND		0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
1-Methylnaphthalene	0.0335	J	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1
2-Methylnaphthalene	0.0549	J	0.20	0.020	ug/L		07/25/19 08:28	08/02/19 18:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*111*		*33 - 138*	*07/25/19 08:28*	*08/02/19 18:25*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/25/19 08:28*	*08/02/19 18:25*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*07/25/19 08:28*	*08/02/19 18:25*	*1*

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

Lab Sample ID: LCS 400-449448/20-A
Matrix: Water
Analysis Batch: 450731

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.5		ug/L		82	41 - 120
Acenaphthylene	30.0	24.0		ug/L		80	44 - 120
Anthracene	30.0	23.8		ug/L		79	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	23.7		ug/L		79	52 - 120
Benzo[b]fluoranthene	30.0	23.7		ug/L		79	53 - 134
Benzo[g,h,i]perylene	30.0	23.7		ug/L		79	47 - 133
Benzo[k]fluoranthene	30.0	24.2		ug/L		81	57 - 134
Chrysene	30.0	23.6		ug/L		79	55 - 122
Dibenz(a,h)anthracene	30.0	26.8		ug/L		89	48 - 146
Fluoranthene	30.0	23.8		ug/L		79	54 - 128
Fluorene	30.0	23.8		ug/L		79	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	23.7		ug/L		79	43 - 142
Phenanthrene	30.0	24.1		ug/L		80	48 - 120
Pyrene	30.0	23.9		ug/L		80	48 - 132
1-Methylnaphthalene	30.0	22.9		ug/L		76	41 - 120
2-Methylnaphthalene	30.0	22.1		ug/L		74	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*93*		*33 - 138*
2-Fluorobiphenyl	*75*		*15 - 122*
Nitrobenzene-d5	*73*		*19 - 130*

Lab Sample ID: LCSD 400-449448/21-A
Matrix: Water
Analysis Batch: 450731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449448

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.4		ug/L		91	41 - 120	11	56
Acenaphthylene	30.0	26.2		ug/L		87	44 - 120	9	56
Anthracene	30.0	28.9		ug/L		96	49 - 120	19	51
Benzo[a]anthracene	30.0	26.3		ug/L		88	61 - 135	11	49
Benzo[a]pyrene	30.0	25.2		ug/L		84	52 - 120	6	50
Benzo[b]fluoranthene	30.0	26.9		ug/L		90	53 - 134	13	54
Benzo[g,h,i]perylene	30.0	25.5		ug/L		85	47 - 133	7	50
Benzo[k]fluoranthene	30.0	25.4		ug/L		85	57 - 134	5	52
Chrysene	30.0	26.3		ug/L		88	55 - 122	11	50
Dibenz(a,h)anthracene	30.0	29.2		ug/L		97	48 - 146	8	50
Fluoranthene	30.0	27.2		ug/L		91	54 - 128	14	52
Fluorene	30.0	28.2		ug/L		94	45 - 125	17	56
Indeno[1,2,3-cd]pyrene	30.0	25.5		ug/L		85	43 - 142	7	51
Phenanthrene	30.0	27.1		ug/L		90	48 - 120	12	56
Pyrene	30.0	27.1		ug/L		90	48 - 132	13	52
1-Methylnaphthalene	30.0	25.4		ug/L		85	41 - 120	10	55
2-Methylnaphthalene	30.0	25.3		ug/L		84	32 - 124	14	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*94*		*33 - 138*

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

Lab Sample ID: LCSD 400-449448/21-A
Matrix: Water
Analysis Batch: 450731

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449448

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	82		15 - 122
Nitrobenzene-d5	87		19 - 130

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-448993/1-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448993

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		07/22/19 13:44	07/22/19 20:02	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 13:44	07/22/19 20:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		51 - 149	07/22/19 13:44	07/22/19 20:02	1

Lab Sample ID: LCS 400-448993/2-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.0897		ug/L		90	60 - 140
1,2-Dibromoethane	0.100	0.0911		ug/L		91	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	86		51 - 149

Lab Sample ID: MB 400-449012/1-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449012

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		07/22/19 15:26	07/23/19 05:48	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 15:26	07/23/19 05:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		51 - 149	07/22/19 15:26	07/23/19 05:48	1

Lab Sample ID: LCS 400-449012/2-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449012

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.119		ug/L		119	60 - 140
1,2-Dibromoethane	0.100	0.0953		ug/L		95	60 - 140

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-449012/2-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449012

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	93		51 - 149

Lab Sample ID: LCSD 400-449012/3-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449012

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.100	0.130		ug/L		130	60 - 140	9	30
1,2-Dibromoethane			0.100	0.105		ug/L		105	60 - 140	10	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	103		51 - 149

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Recor

AECOM

☐ACCUTEST (_____)

☐CALSCIENCE (_____)

☑TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr Pensacola, FL 32514 (850-474-1001))

☐Other (Lab Vendor # 1364589 (TestAmerica))

Please Check Appropriate Box:

☐SGW FDG | ☐PIPELINE | ☐RETAIL

☐CHEMICALS | ☐CONSULTANT | ☐LUBES

☐TRANSPORTATION | ☑OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PO #: 60592794 - 1.03.003 | 60592794 - 1.03.0033

PlaNet Site or P: 25278 400-173131 COC

GSAP Project ID: USPC/00114/R/02

IF NO INCIDENT # APPLIES E: 7/12/19

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 60592794 - 1.03.003 | 60592794 - 1.03.0033

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; elizabeth.kunkel@aecom.com; bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): J. Ragotte, I. Partin.

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

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑STANDARD (14 DAY) ☐5 DAYS ☐3 DAYS ☐2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND

☐LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑LEVEL 2 ☐LEVEL 3 ☑LEVEL 4 ☑OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

- Please include "J" values on Reports
- Please provide sample receipt upon login

☑SHELL CONTRACT RATE APPLIES
☐STATE REIMBURSEMENT RATE APPLIES
☐EDD NOT NEEDED
☑RECEIPT VERIFICATION REQUESTED
☐PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60592794 - 1.03.003: VOC 8260; SVOC 8270

UNIT COST 60592794 - 1.03.0033: 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-071219-8011-A	7/12/19	0800	Water	2					2			2	
	TB-ROX-071219-8260-A		0800		2					2	2			
	ROST4PZG-ROX-071219		0950		4			2		6	2	1	2	1
	MW1D-ROX-071219		0940		4			2		6	2	1	2	1
	MW5-ROX-071219		1030		4			2		6	2	1	2	1
	ROST4PZE-ROX-071219		1120		4			2		6	2	1	2	1
	ROST4PZC-ROX-071219		1210		4			2		6	2	1	2	1

	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Fedex: 4782 2882 5377 4782 2882 5388 4782 2882 5399 4782 2882 5403	7/12/19	1800
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date 7-13-19 ~~0904~~	Time 0904

Custody seal #'s: 1001, 1002, 1003, 1004, 1003234, 1003235, 1003236, 1003237

3.7°C; 4.8°C; 1.0°C; 3.6°C IR-8

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8/6/2019

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**
60592794 - 1.03.003 / 60592794 - 1.03.0033	USPC/00114/R/02

☐CHECK IF NO INCIDENT # APPLIES
DATE: 7/12/19
PAGE: 2 of 2

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): 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
60592794 - 1.03.003 / 60592794 - 1.03.0033
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com; elizabeth.kunkel@aecom.com; bob.billman@aecom.com
AECOM Other ID:
SAMPLER NAME(S) (Print): B. Howell T. Jones
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑STANDARD (14 DAY) ☐5 DAYS ☐3 DAYS ☐2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND
☐LA - RWQCB REPORT FORMAT
DELIVERABLES: ☑LEVEL 2 ☐LEVEL 3 ☑LEVEL 4 ☑OTHER (SPECIFY) EDD
TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑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 60592794 - 1.03.003: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0033: VOC 8011	PAH 8270LL	FIELD NOTES: TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
	TB-ROX-071219-8260-B	7/12/19	0000	Water	X					2	2				
	TB-ROX-071219-8011-B		0000		X					2			2		
	P74-ROX-071219-FB		0855		X			X		6	2	1	2	1	
	P74-ROX-071219		0920		X			X		6	2	1	2	1	
	P93C-ROX-071219		1010		X			X		6	2	1	2	1	
	P93D-ROX-071219		1055		X			X		6	2	1	2	1	
	P93B-ROX-071219		1120		X			X		6	2	1	2	1	
	P93B-ROX-071219-DUP		1120		X			X		6	2	1	2	1	
	P56-ROX-071219		1315		X			X		6	2	1	2	1	

	Received by (Signature)	Date	Time
Relinquished by (Signature)	Fedex: same as pg. 1	7/12/19	1800
Relinquished by (Signature)	Received by (Signature)	Date	Time
Relinquished by (Signature)	Received by (Signature)	Date	Time
		7-13-19	0904

Custody seal #'s: same as page 1

Version: 14Dec15

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8/6/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-173131-1

Login Number: 173131
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	3.7°C 4.8°C 1.0°C 3.6°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 400-173131-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-20
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-20
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 3rd Quarter 2019 Data Review

Laboratory SDG: 400-173195-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/12/2019

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

Sample Identification	Sample Identification
TB-ROX-071519-8260	TB-ROX-071519-8011
T12-ROX-071519	P57-ROX-071519
P57-ROX-071519-Dup	P93A-ROX-071519
P58-ROX-071519	P58-ROX-071519-Dup

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated VOCs and bis(2-ethylhexyl) phthalate were detected in the method blanks. Several SVOC LCS/LCD recoveries and/or SVOC LCS/LCSD RPDs were outside evaluation criteria. Several SVOC and PAH surrogate recoveries were outside criteria in several investigative and QC samples. Several PAH and internal standard area recoveries were outside criteria in sample P58-ROX-071519. In field duplicate pair P58-ROX-071519/P58-ROX-071519-Dup, results for several analytes were qualified due to field duplicate RPD above evaluation criteria, or because the difference in results was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (**UJ/J**). Samples were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications for bis(2-chloroethyl) ether and dibenz[a,h]acridine were outside acceptance criteria, biased low; and the continuing calibration verifications for acenaphthene, fluorene, and benzo[g,h,i]perylene were outside acceptance criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-448672/4	VOCs	Bromomethane	1.07 µg/L
MB 400-448672/4	VOCs	1-Chlorohexane	1.12 µg/L
MB 400-448615/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	8.53 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
P57-ROX-071519	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/LCSD 400-448615/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**144**/138	4	39-135/30
LCS/LCSD 400-448615/2-A/3-A	SVOCs	Hexachloroethane	41/**40**	4	41-120/30
LCS/LCSD 400-448615/4-A/5-A	SVOCs	Benzenethiol	43/**4**	**165**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-448615/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
T12-ROX-071519	SVOCs	Benzenethiol	**UJ**
T12-ROX-071519	SVOCs	Hexachloroethane	**UJ**
P57-ROX-071519	SVOCs	Benzenethiol	**UJ**
P57-ROX-071519	SVOCs	Hexachloroethane	**UJ**
P57-ROX-071519-Dup	SVOCs	Benzenethiol	**UJ**
P57-ROX-071519-Dup	SVOCs	Hexachloroethane	**UJ**
P93A-ROX-071519	SVOCs	Benzenethiol	**UJ**
P93A-ROX-071519	SVOCs	Hexachloroethane	**UJ**

Sample ID	Parameter	Analyte	Qualification
P58-ROX-071519	SVOCs	Benzenethiol	**UJ**
P58-ROX-071519	SVOCs	Hexachloroethane	**UJ**
P58-ROX-071519-Dup	SVOCs	Benzenethiol	**UJ**
P58-ROX-071519-Dup	SVOCs	Hexachloroethane	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
T12-ROX-071519	SVOCs	Terphenyl-d_{14}	**52**	53-125
P57-ROX-071519	SVOCs	Terphenyl-d_{14}	**49**	53-125
P57-ROX-071519-Dup	SVOCs	Terphenyl-d_{14}	**44**	53-125
P58-ROX-071519	PAHs	Nitrobenzene-d_5	**155**	19-130
P58-ROX-071519	SVOCs	Phenol-d_5	**3**	10-120
P58-ROX-071519	SVOCs	Terphenyl-d_{14}	**37**	53-125
P58-ROX-071519-Dup	PAHs	Nitrobenzene-d_5	**155**	19-130
P58-ROX-071519-Dup	SVOCs	Terphenyl-d_{14}	**34**	53-125
MB 400-448615/1-A	PAHs	Terphenyl-d_{14}	**230**	33-138
MB 400-448615/1-A	PAHs	2-Fluorobiphenyl	**146**	15-122

Qualifications due to surrogate recoveries were not required if only one of three base/neutral or acid fraction surrogate recoveries were outside evaluation criteria in the associated SVOC and/or PAH samples. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Method blank MB 400-448615/1-A is a quality control sample and does not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
P58-ROX-071519	PAHs	Naphthalene-d_8	**1285438**	320577-1282306
P58-ROX-071519	PAHs	Acenaphthene-d_{10}	**810045**	192326-769302

Analytical data that required qualification based on internal standard area recoveries are included in the table below.

Sample ID	Parameter	Analyte	Qualification
P58-ROX-071519	PAHs	1-Methylnaphthalene	**J**

Sample ID	Parameter	Analyte	Qualification
P58-ROX-071519	PAHs	2-Methylnaphthalene	J
P58-ROX-071519	PAHs	Acenaphthylene	UJ
P58-ROX-071519	PAHs	Acenapthene	UJ

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P57-ROX-071519	P57-ROX-071519-Dup
P58-ROX-071519	P58-ROX-071519-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Anthracene	> 2X RL	UJ/J
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Benzo[a]anthracene	> 2X RL	J/J
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Benzo[a]pyrene	> 2X RL	J/J
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Chrysene	73	J/J
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Fluorene	> 2X RL	J/J
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Phenanthrene	52	J/J
P58-ROX-071519	P58-ROX-071519-Dup	PAHs	Pyrene	91	J/J

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted, with the exception of VOCs in sample P93A-ROX-071519. VOCs were non-detect at a dilution factor of 20X, with a raised reporting limits of between 20 and 500 µg/L. Due to historical VOC detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

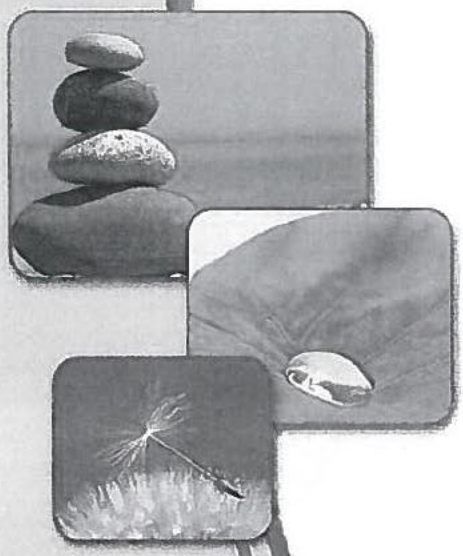
Were additional qualifications applied?

Yes, VOCs in sample P93A-ROX-071519were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93A-ROX-071519	VOCs	All non-detects	**UJ**

Additionally, the continuing calibration verifications for bis(2-chloroethyl) ether and dibenz[a,h]acridine were outside acceptance criteria, biased low; and the continuing calibration verifications for acenaphthene, fluorene, and benzo[g,h,i]perylene were outside acceptance criteria, biased high. Data are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
T12-ROX-071519	SVOCs	bis(2-Chloroethyl) ether	**UJ**
T12-ROX-071519	SVOCs	Dibenz[a,h]acridine	**UJ**
P57-ROX-071519	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P57-ROX-071519	SVOCs	Dibenz[a,h]acridine	**UJ**
P57-ROX-071519-Dup	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P57-ROX-071519-Dup	SVOCs	Dibenz[a,h]acridine	**UJ**
P93A-ROX-071519	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P93A-ROX-071519	SVOCs	Dibenz[a,h]acridine	**UJ**
P58-ROX-071519	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P58-ROX-071519	SVOCs	Dibenz[a,h]acridine	**UJ**
P58-ROX-071519-Dup	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P58-ROX-071519-Dup	SVOCs	Dibenz[a,h]acridine	**UJ**
P57-ROX-071519	PAHs	Acenaphthene	**J**
P57-ROX-071519	PAHs	Fluorene	**J**
P58-ROX-071519-Dup	PAHs	Benzo[g,h,i]perylene	**J**



eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 400-173195-1
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:
8/1/2019 11:49:41 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 8/12/19 MR

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: 400-173195-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-173195-1

Comments
No additional comments.

Receipt
The samples were received on 7/16/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.1° C and 1.7° C.

GC/MS VOA
Method(s) 8260B: The initial calibration verification (ICV) analyzed in batch 400-441311 was outside method criteria for the following analyte(s): Bromomethane As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 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-071519-8260 (400-173195-1), T12-ROX-071519 (400-173195-3), P57-ROX-071519 (400-173195-4), P57-ROX-071519-DUP (400-173195-5), P93A-ROX-071519 (400-173195-6), P58-ROX-071519 (400-173195-7) and P58-ROX-07519-DUP (400-173195-8). 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(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: T12-ROX-071519 (400-173195-3), P57-ROX-071519 (400-173195-4), P57-ROX-071519-DUP (400-173195-5), P93A-ROX-071519 (400-173195-6), P58-ROX-071519 (400-173195-7) and P58-ROX-07519-DUP (400-173195-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The method blank for analytical batch 400-448672 contained Bromomethane and 1-Chlorohexane above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

GC/MS Semi VOA
Method(s) 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-448615 and analytical batch 400-448802 recovered outside control limits for the following analytes: Benzenethiol.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448802 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Nitrophenol, 4-Chloro-3-methylphenol and Aniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448802 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether and Dibenz[a,h]acridine. 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(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: T12-ROX-071519 (400-173195-3), P57-ROX-071519 (400-173195-4), P57-ROX-071519-DUP (400-173195-5) and P58-ROX-07519-DUP (400-173195-8). These results have been reported and qualified.

Method(s) 8270D: Surrogate recovery for the following sample was outside control limits: P58-ROX-071519 (400-173195-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-448802 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-173195-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method(s) 8270D: The method blank for preparation batch 400-448615 and analytical batch 400-449209 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(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-449209 recovered above the upper control limit for 3,3'-Dichlorobenzidine, 4,6-Dinitro-ortho-cresol, 4-Bromophenyl phenyl ether and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 400-449209 recovered outside acceptance criteria, low biased, for Bis(2-chloroethyl)ether, 4-Chlorophenyl phenyl ether, 1,4-Dioxane and Pyridine. 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(s) 8270D: The following analyte(s) recovered outside control limits for the LCS and LCSD associated with preparation batch 400-448615 and analytical batch 400-449209: Hexachloroethane and 3,3'-Dichlorobenzidine. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-448615 and analytical batch 400-448802 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(s) 8270D LL: Surrogate recovery for the following sample was outside the upper control limit: (MB 400-448615/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-449815 recovered above the upper control limit for Benzo[g,h,i]perylene, Indeno[1,2,3-cd]pyrene 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(s) 8270D LL: The following samples were diluted to bring the concentration of target analytes within the calibration range: P58-ROX-07519-DUP (400-173195-8). Elevated reporting limits (RLs) are provided.

Method(s) 8270D LL: The following sample was diluted due to the nature of the sample matrix: P57-ROX-071519 (400-173195-4). Elevated reporting limits (RLs) are provided.

Method(s) 8270D LL: The continuing calibration verification (CCV) associated with batch 400-449887 recovered above the upper control limit for Acenaphthene, Benzo[g,h,i]perylene, Pyrene and Fluorene. The samples associated with this CCV were below reporting limit for the affected analytes; therefore, the data have been reported.

Method(s) 8270D LL: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: P58-ROX-071519 (400-173195-7).

Method(s) 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 400-449887/3). These results have been reported and qualified.

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

GC Semi VOA

Method(s) 8011: The continuing calibration verification (CCV) associated with batch 400-449076 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(s) 8011: The continuing calibration verification (CCV) associated with batch 400-449076 recovered above the upper control limit

Job ID: 400-173195-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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: 400-173195-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-173195-1	TB-ROX-071519-8260	Water	07/15/19 00:00	07/16/19 09:10	
400-173195-2	TB-ROX-071519-8011	Water	07/15/19 00:00	07/16/19 09:10	
400-173195-3	T12-ROX-071519	Water	07/15/19 09:00	07/16/19 09:10	
400-173195-4	P57-ROX-071519	Water	07/15/19 09:55	07/16/19 09:10	
400-173195-5	P57-ROX-071519-DUP	Water	07/15/19 09:55	07/16/19 09:10	
400-173195-6	P93A-ROX-071519	Water	07/15/19 11:10	07/16/19 09:10	
400-173195-7	P58-ROX-071519	Water	07/15/19 12:05	07/16/19 09:10	
400-173195-8	P58-ROX-07519-DUP	Water	07/15/19 12:05	07/16/19 09:10	

Detection Summary

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

Job ID: 400-173195-1

Client Sample ID: TB-ROX-071519-8260

Lab Sample ID: 400-173195-1

No Detections.

Client Sample ID: TB-ROX-071519-8011

Lab Sample ID: 400-173195-2

No Detections.

Client Sample ID: T12-ROX-071519

Lab Sample ID: 400-173195-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1700		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	28		10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	9.5	J	10	5.3	ug/L	10		8260B	Total/NA
m-Xylene & p-Xylene	97		50	16	ug/L	10		8260B	Total/NA
Naphthalene	33		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	18		10	6.9	ug/L	10		8260B	Total/NA
Toluene	100		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	15		10	8.2	ug/L	10		8260B	Total/NA
Xylenes, Total	100		100	16	ug/L	10		8260B	Total/NA
Acenaphthene	0.23		0.19	0.019	ug/L	1		8270D LL	Total/NA
Anthracene	0.073	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.20		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.47		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 - DL	34		0.97	0.097	ug/L	5		8270D LL	Total/NA
Di-n-butyl phthalate	3.4	J	9.7	2.6	ug/L	1		8270D	Total/NA
Phenol	76		9.7	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P57-ROX-071519

Lab Sample ID: 400-173195-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	35		25	13	ug/L	25		8260B	Total/NA
Isopropylbenzene	23	J	25	13	ug/L	25		8260B	Total/NA
Naphthalene	66		25	25	ug/L	25		8260B	Total/NA
N-Propylbenzene	38		25	17	ug/L	25		8260B	Total/NA
Toluene	13	J	25	10	ug/L	25		8260B	Total/NA
Benzene - DL	15000		100	38	ug/L	100		8260B	Total/NA
Acenaphthene	0.48	J	0.97	0.097	ug/L	5		8270D LL	Total/NA
Fluorene	0.92	J	0.97	0.10	ug/L	5		8270D LL	Total/NA
Phenanthrene	0.58	J	0.97	0.097	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene	34		0.97	0.097	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	45		0.97	0.097	ug/L	5		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	~~5.8~~	J B	9.7	4.8	ug/L	1		8270D	Total/NA
Dibenzofuran	0.59	J	9.7	0.50	ug/L	1		8270D	Total/NA
Phenol - DL	370		48	13	ug/L	5		8270D	Total/NA

Client Sample ID: P57-ROX-071519-DUP

Lab Sample ID: 400-173195-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	36		25	13	ug/L	25		8260B	Total/NA
Isopropylbenzene	24	J	25	13	ug/L	25		8260B	Total/NA
Naphthalene	68		25	25	ug/L	25		8260B	Total/NA
N-Propylbenzene	40		25	17	ug/L	25		8260B	Total/NA
Toluene	15	J	25	10	ug/L	25		8260B	Total/NA
Benzene - DL	16000		100	38	ug/L	100		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P57-ROX-071519-DUP (Continued)

Lab Sample ID: 400-173195-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.28		0.20	0.020	ug/L	1		8270D LL	Total/NA
Fluorene	0.52		0.20	0.021	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.50		0.20	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene - DL	33		1.0	0.10	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene - DL	47		1.0	0.10	ug/L	5		8270D LL	Total/NA
Dibenzofuran	0.57	J	10	0.53	ug/L	1		8270D	Total/NA
Phenol - DL	310		51	13	ug/L	5		8270D	Total/NA

Client Sample ID: P93A-ROX-071519

Lab Sample ID: 400-173195-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	10000		50	19	ug/L	50		8260B	Total/NA
1-Methylnaphthalene	0.75		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.12	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Butyl benzyl phthalate	0.67	J	9.6	0.66	ug/L	1		8270D	Total/NA
Phenol	48		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P58-ROX-071519

Lab Sample ID: 400-173195-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	140	J	200	100	ug/L	200		8260B	Total/NA
Benzene - DL	87000		500	190	ug/L	500		8260B	Total/NA
Benzo[a]anthracene	0.79		0.20	0.041	ug/L	1		8270D LL	Total/NA
Benzo[a]pyrene	0.73		0.20	0.041	ug/L	1		8270D LL	Total/NA
Benzo[b]fluoranthene	0.80		0.20	0.041	ug/L	1		8270D LL	Total/NA
Chrysene	1.4		0.20	0.041	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.41		0.20	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	2.4		0.20	0.020	ug/L	1		8270D LL	Total/NA
Pyrene	1.5		0.20	0.020	ug/L	1		8270D LL	Total/NA
Fluorene - DL	1.7		1.0	0.11	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene - DL	59		1.0	0.10	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene - DL	33		1.0	0.10	ug/L	5		8270D LL	Total/NA
Phenol - DL	120		51	13	ug/L	5		8270D	Total/NA

Client Sample ID: P58-ROX-07519-DUP

Lab Sample ID: 400-173195-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	130	J	200	100	ug/L	200		8260B	Total/NA
Benzene - DL	86000		500	190	ug/L	500		8260B	Total/NA
Acenaphthylene	0.52		0.19	0.019	ug/L	1		8270D LL	Total/NA
Anthracene	1.3		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzo[a]anthracene	1.5		0.19	0.039	ug/L	1		8270D LL	Total/NA
Benzo[a]pyrene	1.4		0.19	0.039	ug/L	1		8270D LL	Total/NA
Benzo[b]fluoranthene	1.1		0.19	0.039	ug/L	1		8270D LL	Total/NA
Benzo[k]fluoranthene	0.21		0.19	0.039	ug/L	1		8270D LL	Total/NA
Chrysene	3.0		0.19	0.039	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.68		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	4.6		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	4.1		0.19	0.019	ug/L	1		8270D LL	Total/NA
Pyrene	4.0		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzo[g,h,i]perylene - DL	0.84	J	0.97	0.19	ug/L	5		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene - DL	0.28	J	0.97	0.19	ug/L	5		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P58-ROX-07519-DUP (Continued)

Lab Sample ID: 400-173195-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene - DL	59		0.97	0.097	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene - DL	40		0.97	0.097	ug/L	5		8270D LL	Total/NA
Phenol - DL	150		48	13	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-173195-1

Client Sample ID: TB-ROX-071519-8260
Date Collected: 07/15/19 00:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-1
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			07/19/19 20:06	1
Acrolein	ND		20	10	ug/L			07/19/19 20:06	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/19 20:06	1
Benzene	ND		1.0	0.38	ug/L			07/19/19 20:06	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/19 20:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/19 20:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Bromoform	ND		5.0	0.71	ug/L			07/19/19 20:06	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/19 20:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/19 20:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/19 20:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/19 20:06	1
Chloroform	ND		1.0	0.60	ug/L			07/19/19 20:06	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/19 20:06	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/19 20:06	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/19 20:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/19 20:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/19 20:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/19 20:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/19 20:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/19 20:06	1
2-Hexanone	ND		25	3.1	ug/L			07/19/19 20:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/19 20:06	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/19 20:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 20:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/19 20:06	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/19 20:06	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/19 20:06	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/19 20:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/19 20:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/19 20:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/19 20:06	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/19 20:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/19 20:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/19 20:06	1

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

Job ID: 400-173195-1

Client Sample ID: TB-ROX-071519-8260
Date Collected: 07/15/19 00:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-1
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			07/19/19 20:06	1
Styrene	ND		1.0	1.0	ug/L			07/19/19 20:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/19 20:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/19 20:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/19 20:06	1
Toluene	ND		1.0	0.41	ug/L			07/19/19 20:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/19 20:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/19 20:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/19 20:06	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/19 20:06	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/19 20:06	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/19 20:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/19 20:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/19 20:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/19 20:06	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/19 20:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/19 20:06	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/19 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/19/19 20:06*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*07/19/19 20:06*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/19/19 20:06*	*1*

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

Job ID: 400-173195-1

Client Sample ID: TB-ROX-071519-8011
Date Collected: 07/15/19 00:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-2
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		07/22/19 15:26	07/23/19 08:25	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		07/22/19 15:26	07/23/19 08:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/22/19 15:26*	*07/23/19 08:25*	*1*

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

Job ID: 400-173195-1

Client Sample ID: T12-ROX-071519
Date Collected: 07/15/19 09:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-3
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			07/19/19 20:32	10
Acrolein	ND		200	100	ug/L			07/19/19 20:32	10
Acrylonitrile	ND		100	28	ug/L			07/19/19 20:32	10
Benzene	1700		10	3.8	ug/L			07/19/19 20:32	10
Bromobenzene	ND		10	5.4	ug/L			07/19/19 20:32	10
Bromochloromethane	ND		10	5.2	ug/L			07/19/19 20:32	10
Bromodichloromethane	ND		10	5.0	ug/L			07/19/19 20:32	10
Bromoform	ND		50	7.1	ug/L			07/19/19 20:32	10
Bromomethane	ND		10	9.8	ug/L			07/19/19 20:32	10
2-Butanone (MEK)	ND		250	26	ug/L			07/19/19 20:32	10
Carbon disulfide	ND		10	5.0	ug/L			07/19/19 20:32	10
Carbon tetrachloride	ND		10	5.0	ug/L			07/19/19 20:32	10
Chlorobenzene	ND		10	5.0	ug/L			07/19/19 20:32	10
Dibromochloromethane	ND		10	5.0	ug/L			07/19/19 20:32	10
Chloroethane	ND		10	7.6	ug/L			07/19/19 20:32	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			07/19/19 20:32	10
Chloroform	ND		10	6.0	ug/L			07/19/19 20:32	10
1-Chlorohexane	ND		10	7.0	ug/L			07/19/19 20:32	10
Chloromethane	ND		10	8.3	ug/L			07/19/19 20:32	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			07/19/19 20:32	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			07/19/19 20:32	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			07/19/19 20:32	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			07/19/19 20:32	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			07/19/19 20:32	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			07/19/19 20:32	10
1,1-Dichloroethane	ND		10	5.0	ug/L			07/19/19 20:32	10
1,2-Dichloroethane	ND		10	5.0	ug/L			07/19/19 20:32	10
1,1-Dichloroethene	ND		10	5.0	ug/L			07/19/19 20:32	10
1,2-Dichloropropane	ND		10	5.0	ug/L			07/19/19 20:32	10
1,3-Dichloropropane	ND		10	5.0	ug/L			07/19/19 20:32	10
2,2-Dichloropropane	ND		10	5.0	ug/L			07/19/19 20:32	10
1,1-Dichloropropene	ND		10	5.0	ug/L			07/19/19 20:32	10
Ethylbenzene	28		10	5.0	ug/L			07/19/19 20:32	10
Ethyl methacrylate	ND		10	6.0	ug/L			07/19/19 20:32	10
Hexachlorobutadiene	ND		50	9.0	ug/L			07/19/19 20:32	10
2-Hexanone	ND		250	31	ug/L			07/19/19 20:32	10
Isopropylbenzene	9.5	J	10	5.3	ug/L			07/19/19 20:32	10
Methylene bromide	ND		50	5.9	ug/L			07/19/19 20:32	10
Methylene Chloride	ND		50	30	ug/L			07/19/19 20:32	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			07/19/19 20:32	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			07/19/19 20:32	10
m-Xylene & p-Xylene	97		50	16	ug/L			07/19/19 20:32	10
Naphthalene	33		10	10	ug/L			07/19/19 20:32	10
n-Butylbenzene	ND		10	7.6	ug/L			07/19/19 20:32	10
N-Propylbenzene	18		10	6.9	ug/L			07/19/19 20:32	10
o-Chlorotoluene	ND		10	5.7	ug/L			07/19/19 20:32	10
o-Xylene	ND		50	6.0	ug/L			07/19/19 20:32	10
p-Chlorotoluene	ND		10	5.6	ug/L			07/19/19 20:32	10
p-Isopropyltoluene	ND		10	7.1	ug/L			07/19/19 20:32	10

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

Job ID: 400-173195-1

Client Sample ID: T12-ROX-071519
Date Collected: 07/15/19 09:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			07/19/19 20:32	10
Styrene	ND		10	10	ug/L			07/19/19 20:32	10
tert-Butylbenzene	ND		10	6.3	ug/L			07/19/19 20:32	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			07/19/19 20:32	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			07/19/19 20:32	10
Tetrachloroethene	ND		10	5.8	ug/L			07/19/19 20:32	10
Toluene	100		10	4.1	ug/L			07/19/19 20:32	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			07/19/19 20:32	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			07/19/19 20:32	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			07/19/19 20:32	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			07/19/19 20:32	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			07/19/19 20:32	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			07/19/19 20:32	10
Trichloroethene	ND		10	5.0	ug/L			07/19/19 20:32	10
Trichlorofluoromethane	ND		10	5.2	ug/L			07/19/19 20:32	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			07/19/19 20:32	10
1,2,4-Trimethylbenzene	15		10	8.2	ug/L			07/19/19 20:32	10
1,3,5-Trimethylbenzene	ND		10	5.6	ug/L			07/19/19 20:32	10
Vinyl acetate	ND		250	20	ug/L			07/19/19 20:32	10
Vinyl chloride	ND		10	5.0	ug/L			07/19/19 20:32	10
Xylenes, Total	100		100	16	ug/L			07/19/19 20:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/19/19 20:32*	*10*
Dibromofluoromethane	*95*		*81 - 121*		*07/19/19 20:32*	*10*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/19/19 20:32*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.23		0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1
Anthracene	0.073	J	0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Chrysene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Fluoranthene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1
Fluorene	0.20		0.19	0.020	ug/L		07/18/19 16:34	07/23/19 19:03	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		07/18/19 16:34	07/23/19 19:03	1
Phenanthrene	0.47		0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1
Pyrene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1
1-Methylnaphthalene	25		0.19	0.019	ug/L		07/18/19 16:34	07/23/19 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/18/19 16:34*	*07/23/19 19:03*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*07/18/19 16:34*	*07/23/19 19:03*	*1*

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

Job ID: 400-173195-1

Client Sample ID: T12-ROX-071519

Date Collected: 07/15/19 09:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-3
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	34		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*125*		*33 - 138*	*07/18/19 16:34*	*07/29/19 17:19*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/18/19 16:34	07/20/19 18:49	1
Benzenethiol	ND	* UJ	9.7	1.6	ug/L		07/18/19 16:34	07/20/19 18:49	1
Benzoic acid	ND		29	7.1	ug/L		07/18/19 16:34	07/20/19 18:49	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 18:49	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/18/19 16:34	07/20/19 18:49	1
Bis(2-chloroethyl)ether	ND	UJ	9.7	0.71	ug/L		07/18/19 16:34	07/20/19 18:49	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		07/18/19 16:34	07/20/19 18:49	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/18/19 16:34	07/20/19 18:49	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/18/19 16:34	07/20/19 18:49	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/18/19 16:34	07/20/19 18:49	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/18/19 16:34	07/20/19 18:49	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/18/19 16:34	07/20/19 18:49	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		07/18/19 16:34	07/20/19 18:49	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/18/19 16:34	07/20/19 18:49	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 18:49	1
Dibenz[a,h]acridine	ND	UJ	9.7	2.9	ug/L		07/18/19 16:34	07/20/19 18:49	1
Dibenzofuran	ND		9.7	0.50	ug/L		07/18/19 16:34	07/20/19 18:49	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/18/19 16:34	07/20/19 18:49	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 18:49	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/18/19 16:34	07/20/19 18:49	1
Di-n-butyl phthalate	3.4	J	9.7	2.6	ug/L		07/18/19 16:34	07/20/19 18:49	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/19 16:34	07/20/19 18:49	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		07/18/19 16:34	07/20/19 18:49	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 18:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 18:49	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/18/19 16:34	07/20/19 18:49	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/18/19 16:34	07/20/19 18:49	1
Hexachloroethane	ND	* UJ	9.7	4.1	ug/L		07/18/19 16:34	07/20/19 18:49	1
Indene	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 18:49	1
Isophorone	ND		9.7	0.55	ug/L		07/18/19 16:34	07/20/19 18:49	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/18/19 16:34	07/20/19 18:49	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/18/19 16:34	07/20/19 18:49	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/18/19 16:34	07/20/19 18:49	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/18/19 16:34	07/20/19 18:49	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/18/19 16:34	07/20/19 18:49	1
Nitrobenzene	ND		9.7	0.53	ug/L		07/18/19 16:34	07/20/19 18:49	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/18/19 16:34	07/20/19 18:49	1

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

Job ID: 400-173195-1

Client Sample ID: T12-ROX-071519
Date Collected: 07/15/19 09:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		9.7	2.0	ug/L		07/18/19 16:34	07/20/19 18:49	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 18:49	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/18/19 16:34	07/20/19 18:49	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		07/18/19 16:34	07/20/19 18:49	1
Pentachlorophenol	ND		19	1.7	ug/L		07/18/19 16:34	07/20/19 18:49	1
Phenol	76		9.7	2.5	ug/L		07/18/19 16:34	07/20/19 18:49	1
Pyridine	ND		9.7	3.1	ug/L		07/18/19 16:34	07/20/19 18:49	1
Quinoline	ND		9.7	5.8	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/18/19 16:34	07/20/19 18:49	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*44*		*34 - 120*	*07/18/19 16:34*	*07/20/19 18:49*	*1*
2-Fluorophenol	*38*		*10 - 120*	*07/18/19 16:34*	*07/20/19 18:49*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*07/18/19 16:34*	*07/20/19 18:49*	*1*
Phenol-d5	*51*		*10 - 120*	*07/18/19 16:34*	*07/20/19 18:49*	*1*
Terphenyl-d14	*52*	*X*	*53 - 125*	*07/18/19 16:34*	*07/20/19 18:49*	*1*
2,4,6-Tribromophenol	*66*		*15 - 135*	*07/18/19 16:34*	*07/20/19 18:49*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		07/22/19 15:26	07/23/19 08:47	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 15:26	07/23/19 08:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/22/19 15:26*	*07/23/19 08:47*	*1*

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

Job ID: 400-173195-1

Client Sample ID: P57-ROX-071519
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		630	250	ug/L			07/19/19 21:26	25
Acrolein	ND		500	250	ug/L			07/19/19 21:26	25
Acrylonitrile	ND		250	70	ug/L			07/19/19 21:26	25
Bromobenzene	ND		25	14	ug/L			07/19/19 21:26	25
Bromochloromethane	ND		25	13	ug/L			07/19/19 21:26	25
Bromodichloromethane	ND		25	13	ug/L			07/19/19 21:26	25
Bromoform	ND		130	18	ug/L			07/19/19 21:26	25
Bromomethane	ND		25	25	ug/L			07/19/19 21:26	25
2-Butanone (MEK)	ND		630	65	ug/L			07/19/19 21:26	25
Carbon disulfide	ND		25	13	ug/L			07/19/19 21:26	25
Carbon tetrachloride	ND		25	13	ug/L			07/19/19 21:26	25
Chlorobenzene	ND		25	13	ug/L			07/19/19 21:26	25
Dibromochloromethane	ND		25	13	ug/L			07/19/19 21:26	25
Chloroethane	ND		25	19	ug/L			07/19/19 21:26	25
2-Chloroethyl vinyl ether	ND		130	50	ug/L			07/19/19 21:26	25
Chloroform	ND		25	15	ug/L			07/19/19 21:26	25
1-Chlorohexane	ND		25	18	ug/L			07/19/19 21:26	25
Chloromethane	ND		25	21	ug/L			07/19/19 21:26	25
cis-1,2-Dichloroethene	ND		25	13	ug/L			07/19/19 21:26	25
cis-1,3-Dichloropropene	ND		130	13	ug/L			07/19/19 21:26	25
1,2-Dichlorobenzene	ND		25	13	ug/L			07/19/19 21:26	25
1,3-Dichlorobenzene	ND		25	14	ug/L			07/19/19 21:26	25
1,4-Dichlorobenzene	ND		25	16	ug/L			07/19/19 21:26	25
Dichlorodifluoromethane	ND		25	21	ug/L			07/19/19 21:26	25
1,1-Dichloroethane	ND		25	13	ug/L			07/19/19 21:26	25
1,2-Dichloroethane	ND		25	13	ug/L			07/19/19 21:26	25
1,1-Dichloroethene	ND		25	13	ug/L			07/19/19 21:26	25
1,2-Dichloropropane	ND		25	13	ug/L			07/19/19 21:26	25
1,3-Dichloropropane	ND		25	13	ug/L			07/19/19 21:26	25
2,2-Dichloropropane	ND		25	13	ug/L			07/19/19 21:26	25
1,1-Dichloropropene	ND		25	13	ug/L			07/19/19 21:26	25
Ethylbenzene	35		25	13	ug/L			07/19/19 21:26	25
Ethyl methacrylate	ND		25	15	ug/L			07/19/19 21:26	25
Hexachlorobutadiene	ND		130	23	ug/L			07/19/19 21:26	25
2-Hexanone	ND		630	78	ug/L			07/19/19 21:26	25
Isopropylbenzene	23	J	25	13	ug/L			07/19/19 21:26	25
Methylene bromide	ND		130	15	ug/L			07/19/19 21:26	25
Methylene Chloride	ND		130	75	ug/L			07/19/19 21:26	25
4-Methyl-2-pentanone (MIBK)	ND		630	45	ug/L			07/19/19 21:26	25
Methyl tert-butyl ether	ND		25	19	ug/L			07/19/19 21:26	25
m-Xylene & p-Xylene	ND		130	40	ug/L			07/19/19 21:26	25
Naphthalene	66		25	25	ug/L			07/19/19 21:26	25
n-Butylbenzene	ND		25	19	ug/L			07/19/19 21:26	25
N-Propylbenzene	38		25	17	ug/L			07/19/19 21:26	25
o-Chlorotoluene	ND		25	14	ug/L			07/19/19 21:26	25
o-Xylene	ND		130	15	ug/L			07/19/19 21:26	25
p-Chlorotoluene	ND		25	14	ug/L			07/19/19 21:26	25
p-Isopropyltoluene	ND		25	18	ug/L			07/19/19 21:26	25
sec-Butylbenzene	ND		25	18	ug/L			07/19/19 21:26	25

Client Sample ID: P57-ROX-071519
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		25	25	ug/L			07/19/19 21:26	25
tert-Butylbenzene	ND		25	16	ug/L			07/19/19 21:26	25
1,1,1,2-Tetrachloroethane	ND		25	13	ug/L			07/19/19 21:26	25
1,1,2,2-Tetrachloroethane	ND		25	13	ug/L			07/19/19 21:26	25
Tetrachloroethene	ND		25	15	ug/L			07/19/19 21:26	25
Toluene	13	J	25	10	ug/L			07/19/19 21:26	25
trans-1,2-Dichloroethene	ND		25	13	ug/L			07/19/19 21:26	25
trans-1,3-Dichloropropene	ND		130	13	ug/L			07/19/19 21:26	25
1,2,3-Trichlorobenzene	ND		25	18	ug/L			07/19/19 21:26	25
1,2,4-Trichlorobenzene	ND		25	21	ug/L			07/19/19 21:26	25
1,1,1-Trichloroethane	ND		25	13	ug/L			07/19/19 21:26	25
1,1,2-Trichloroethane	ND		130	13	ug/L			07/19/19 21:26	25
Trichloroethene	ND		25	13	ug/L			07/19/19 21:26	25
Trichlorofluoromethane	ND		25	13	ug/L			07/19/19 21:26	25
1,2,3-Trichloropropane	ND		130	21	ug/L			07/19/19 21:26	25
1,2,4-Trimethylbenzene	ND		25	21	ug/L			07/19/19 21:26	25
1,3,5-Trimethylbenzene	ND		25	14	ug/L			07/19/19 21:26	25
Vinyl acetate	ND		630	50	ug/L			07/19/19 21:26	25
Vinyl chloride	ND		25	13	ug/L			07/19/19 21:26	25
Xylenes, Total	ND		250	40	ug/L			07/19/19 21:26	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*07/19/19 21:26*	*25*
Dibromofluoromethane	*91*		*81 - 121*		*07/19/19 21:26*	*25*
Toluene-d8 (Surr)	*107*		*80 - 120*		*07/19/19 21:26*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	15000		100	38	ug/L			07/20/19 18:18	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/20/19 18:18*	*100*
Dibromofluoromethane	*93*		*81 - 121*		*07/20/19 18:18*	*100*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 18:18*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.48	J	0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
Acenaphthylene	ND		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
Anthracene	ND		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
Benzo[a]anthracene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Benzo[a]pyrene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Benzo[b]fluoranthene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Benzo[g,h,i]perylene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Benzo[k]fluoranthene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Chrysene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Dibenz(a,h)anthracene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5
Fluoranthene	ND		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
Fluorene	0.92	J	0.97	0.10	ug/L		07/18/19 16:34	07/29/19 17:36	5
Indeno[1,2,3-cd]pyrene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 17:36	5

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

Job ID: 400-173195-1

Client Sample ID: P57-ROX-071519
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.58	J	0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
Pyrene	ND		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
1-Methylnaphthalene	34		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5
2-Methylnaphthalene	45		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 17:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*33 - 138*	*07/18/19 16:34*	*07/29/19 17:36*	*5*
2-Fluorobiphenyl	*79*		*15 - 122*	*07/18/19 16:34*	*07/29/19 17:36*	*5*
Nitrobenzene-d5	*55*		*19 - 130*	*07/18/19 16:34*	*07/29/19 17:36*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/18/19 16:34	07/20/19 19:10	1
Benzenethiol	ND	* UJ	9.7	1.6	ug/L		07/18/19 16:34	07/20/19 19:10	1
Benzoic acid	ND		29	7.1	ug/L		07/18/19 16:34	07/20/19 19:10	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 19:10	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/18/19 16:34	07/20/19 19:10	1
Bis(2-chloroethyl)ether	ND	UJ	9.7	0.72	ug/L		07/18/19 16:34	07/20/19 19:10	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		07/18/19 16:34	07/20/19 19:10	1
Bis(2-ethylhexyl) phthalate	~~6.8~~	J B U	9.7	4.8	ug/L		07/18/19 16:34	07/20/19 19:10	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/18/19 16:34	07/20/19 19:10	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/18/19 16:34	07/20/19 19:10	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/18/19 16:34	07/20/19 19:10	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/18/19 16:34	07/20/19 19:10	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		07/18/19 16:34	07/20/19 19:10	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/18/19 16:34	07/20/19 19:10	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 19:10	1
Dibenz[a,h]acridine	ND	UJ	9.7	2.9	ug/L		07/18/19 16:34	07/20/19 19:10	1
Dibenzofuran	0.59	J	9.7	0.50	ug/L		07/18/19 16:34	07/20/19 19:10	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/18/19 16:34	07/20/19 19:10	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 19:10	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/18/19 16:34	07/20/19 19:10	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/18/19 16:34	07/20/19 19:10	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/19 16:34	07/20/19 19:10	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		07/18/19 16:34	07/20/19 19:10	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 19:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 19:10	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/18/19 16:34	07/20/19 19:10	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/18/19 16:34	07/20/19 19:10	1
Hexachloroethane	ND	* UJ	9.7	4.1	ug/L		07/18/19 16:34	07/20/19 19:10	1
Indene	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 19:10	1
Isophorone	ND		9.7	0.55	ug/L		07/18/19 16:34	07/20/19 19:10	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/18/19 16:34	07/20/19 19:10	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/18/19 16:34	07/20/19 19:10	1

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

Job ID: 400-173195-1

Client Sample ID: P57-ROX-071519
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.7	2.1	ug/L		07/18/19 16:34	07/20/19 19:10	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/18/19 16:34	07/20/19 19:10	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/18/19 16:34	07/20/19 19:10	1
Nitrobenzene	ND		9.7	0.53	ug/L		07/18/19 16:34	07/20/19 19:10	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/18/19 16:34	07/20/19 19:10	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/18/19 16:34	07/20/19 19:10	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 19:10	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/18/19 16:34	07/20/19 19:10	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		07/18/19 16:34	07/20/19 19:10	1
Pentachlorophenol	ND		19	1.8	ug/L		07/18/19 16:34	07/20/19 19:10	1
Pyridine	ND		9.7	3.1	ug/L		07/18/19 16:34	07/20/19 19:10	1
Quinoline	ND		9.7	5.8	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/18/19 16:34	07/20/19 19:10	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*34 - 120*	*07/18/19 16:34*	*07/20/19 19:10*	*1*
2-Fluorophenol	*43*		*10 - 120*	*07/18/19 16:34*	*07/20/19 19:10*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*07/18/19 16:34*	*07/20/19 19:10*	*1*
Phenol-d5	*43*		*10 - 120*	*07/18/19 16:34*	*07/20/19 19:10*	*1*
Terphenyl-d14	*49*	*X*	*53 - 125*	*07/18/19 16:34*	*07/20/19 19:10*	*1*
2,4,6-Tribromophenol	*77*		*15 - 135*	*07/18/19 16:34*	*07/20/19 19:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	370		48	13	ug/L		07/18/19 16:34	07/24/19 03:20	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	0.0054	ug/L		07/22/19 15:26	07/23/19 09:10	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		07/22/19 15:26	07/23/19 09:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/22/19 15:26*	*07/23/19 09:10*	*1*

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

Job ID: 400-173195-1

Client Sample ID: P57-ROX-071519-DUP
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		630	250	ug/L			07/19/19 21:52	25
Acrolein	ND		500	250	ug/L			07/19/19 21:52	25
Acrylonitrile	ND		250	70	ug/L			07/19/19 21:52	25
Bromobenzene	ND		25	14	ug/L			07/19/19 21:52	25
Bromochloromethane	ND		25	13	ug/L			07/19/19 21:52	25
Bromodichloromethane	ND		25	13	ug/L			07/19/19 21:52	25
Bromoform	ND		130	18	ug/L			07/19/19 21:52	25
Bromomethane	ND		25	25	ug/L			07/19/19 21:52	25
2-Butanone (MEK)	ND		630	65	ug/L			07/19/19 21:52	25
Carbon disulfide	ND		25	13	ug/L			07/19/19 21:52	25
Carbon tetrachloride	ND		25	13	ug/L			07/19/19 21:52	25
Chlorobenzene	ND		25	13	ug/L			07/19/19 21:52	25
Dibromochloromethane	ND		25	13	ug/L			07/19/19 21:52	25
Chloroethane	ND		25	19	ug/L			07/19/19 21:52	25
2-Chloroethyl vinyl ether	ND		130	50	ug/L			07/19/19 21:52	25
Chloroform	ND		25	15	ug/L			07/19/19 21:52	25
1-Chlorohexane	ND		25	18	ug/L			07/19/19 21:52	25
Chloromethane	ND		25	21	ug/L			07/19/19 21:52	25
cis-1,2-Dichloroethene	ND		25	13	ug/L			07/19/19 21:52	25
cis-1,3-Dichloropropene	ND		130	13	ug/L			07/19/19 21:52	25
1,2-Dichlorobenzene	ND		25	13	ug/L			07/19/19 21:52	25
1,3-Dichlorobenzene	ND		25	14	ug/L			07/19/19 21:52	25
1,4-Dichlorobenzene	ND		25	16	ug/L			07/19/19 21:52	25
Dichlorodifluoromethane	ND		25	21	ug/L			07/19/19 21:52	25
1,1-Dichloroethane	ND		25	13	ug/L			07/19/19 21:52	25
1,2-Dichloroethane	ND		25	13	ug/L			07/19/19 21:52	25
1,1-Dichloroethene	ND		25	13	ug/L			07/19/19 21:52	25
1,2-Dichloropropane	ND		25	13	ug/L			07/19/19 21:52	25
1,3-Dichloropropane	ND		25	13	ug/L			07/19/19 21:52	25
2,2-Dichloropropane	ND		25	13	ug/L			07/19/19 21:52	25
1,1-Dichloropropene	ND		25	13	ug/L			07/19/19 21:52	25
Ethylbenzene	36		25	13	ug/L			07/19/19 21:52	25
Ethyl methacrylate	ND		25	15	ug/L			07/19/19 21:52	25
Hexachlorobutadiene	ND		130	23	ug/L			07/19/19 21:52	25
2-Hexanone	ND		630	78	ug/L			07/19/19 21:52	25
Isopropylbenzene	24	J	25	13	ug/L			07/19/19 21:52	25
Methylene bromide	ND		130	15	ug/L			07/19/19 21:52	25
Methylene Chloride	ND		130	75	ug/L			07/19/19 21:52	25
4-Methyl-2-pentanone (MIBK)	ND		630	45	ug/L			07/19/19 21:52	25
Methyl tert-butyl ether	ND		25	19	ug/L			07/19/19 21:52	25
m-Xylene & p-Xylene	ND		130	40	ug/L			07/19/19 21:52	25
Naphthalene	68		25	25	ug/L			07/19/19 21:52	25
n-Butylbenzene	ND		25	19	ug/L			07/19/19 21:52	25
N-Propylbenzene	40		25	17	ug/L			07/19/19 21:52	25
o-Chlorotoluene	ND		25	14	ug/L			07/19/19 21:52	25
o-Xylene	ND		130	15	ug/L			07/19/19 21:52	25
p-Chlorotoluene	ND		25	14	ug/L			07/19/19 21:52	25
p-Isopropyltoluene	ND		25	18	ug/L			07/19/19 21:52	25
sec-Butylbenzene	ND		25	18	ug/L			07/19/19 21:52	25

Client Sample ID: P57-ROX-071519-DUP
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		25	25	ug/L			07/19/19 21:52	25
tert-Butylbenzene	ND		25	16	ug/L			07/19/19 21:52	25
1,1,1,2-Tetrachloroethane	ND		25	13	ug/L			07/19/19 21:52	25
1,1,2,2-Tetrachloroethane	ND		25	13	ug/L			07/19/19 21:52	25
Tetrachloroethene	ND		25	15	ug/L			07/19/19 21:52	25
Toluene	15	J	25	10	ug/L			07/19/19 21:52	25
trans-1,2-Dichloroethene	ND		25	13	ug/L			07/19/19 21:52	25
trans-1,3-Dichloropropene	ND		130	13	ug/L			07/19/19 21:52	25
1,2,3-Trichlorobenzene	ND		25	18	ug/L			07/19/19 21:52	25
1,2,4-Trichlorobenzene	ND		25	21	ug/L			07/19/19 21:52	25
1,1,1-Trichloroethane	ND		25	13	ug/L			07/19/19 21:52	25
1,1,2-Trichloroethane	ND		130	13	ug/L			07/19/19 21:52	25
Trichloroethene	ND		25	13	ug/L			07/19/19 21:52	25
Trichlorofluoromethane	ND		25	13	ug/L			07/19/19 21:52	25
1,2,3-Trichloropropane	ND		130	21	ug/L			07/19/19 21:52	25
1,2,4-Trimethylbenzene	ND		25	21	ug/L			07/19/19 21:52	25
1,3,5-Trimethylbenzene	ND		25	14	ug/L			07/19/19 21:52	25
Vinyl acetate	ND		630	50	ug/L			07/19/19 21:52	25
Vinyl chloride	ND		25	13	ug/L			07/19/19 21:52	25
Xylenes, Total	ND		250	40	ug/L			07/19/19 21:52	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*07/19/19 21:52*	*25*
Dibromofluoromethane	*90*		*81 - 121*		*07/19/19 21:52*	*25*
Toluene-d8 (Surr)	*109*		*80 - 120*		*07/19/19 21:52*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	16000		100	38	ug/L			07/20/19 18:44	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*07/20/19 18:44*	*100*
Dibromofluoromethane	*94*		*81 - 121*		*07/20/19 18:44*	*100*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 18:44*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.28		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 19:37	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 19:37	1
Anthracene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 19:37	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Chrysene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1
Fluoranthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 19:37	1
Fluorene	0.52		0.20	0.021	ug/L		07/18/19 16:34	07/23/19 19:37	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 19:37	1

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

Job ID: 400-173195-1

Client Sample ID: P57-ROX-071519-DUP

Lab Sample ID: 400-173195-5

Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.50		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 19:37	1
Pyrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*126*		*33 - 138*	*07/18/19 16:34*	*07/23/19 19:37*	*1*
2-Fluorobiphenyl	*89*		*15 - 122*	*07/18/19 16:34*	*07/23/19 19:37*	*1*
Nitrobenzene-d5	*74*		*19 - 130*	*07/18/19 16:34*	*07/23/19 19:37*	*1*

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	33		1.0	0.10	ug/L		07/18/19 16:34	07/30/19 23:04	5
2-Methylnaphthalene	47		1.0	0.10	ug/L		07/18/19 16:34	07/30/19 23:04	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/18/19 16:34	07/20/19 19:31	1
Benzenethiol	ND	* US	10	1.7	ug/L		07/18/19 16:34	07/20/19 19:31	1
Benzoic acid	ND		30	7.4	ug/L		07/18/19 16:34	07/20/19 19:31	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/18/19 16:34	07/20/19 19:31	1
Bis(2-chloroethyl)ether	ND	US	10	0.75	ug/L		07/18/19 16:34	07/20/19 19:31	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		07/18/19 16:34	07/20/19 19:31	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/18/19 16:34	07/20/19 19:31	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/18/19 16:34	07/20/19 19:31	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/18/19 16:34	07/20/19 19:31	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/19 16:34	07/20/19 19:31	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/19 16:34	07/20/19 19:31	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/18/19 16:34	07/20/19 19:31	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/19 16:34	07/20/19 19:31	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
Dibenz[a,h]acridine	ND	US	10	3.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
Dibenzofuran	0.57	J	10	0.53	ug/L		07/18/19 16:34	07/20/19 19:31	1
3,3'-Dichlorobenzidine	ND	*	10	2.6	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
Diethyl phthalate	ND		10	0.71	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/19 16:34	07/20/19 19:31	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/18/19 16:34	07/20/19 19:31	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/19 16:34	07/20/19 19:31	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/20/19 19:31	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		07/18/19 16:34	07/20/19 19:31	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/19 16:34	07/20/19 19:31	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/18/19 16:34	07/20/19 19:31	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/19 16:34	07/20/19 19:31	1
Hexachloroethane	ND	* US	10	4.3	ug/L		07/18/19 16:34	07/20/19 19:31	1
Indene	ND		10	1.0	ug/L		07/18/19 16:34	07/20/19 19:31	1

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

Job ID: 400-173195-1

Client Sample ID: P57-ROX-071519-DUP
Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		10	0.58	ug/L		07/18/19 16:34	07/20/19 19:31	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/19 16:34	07/20/19 19:31	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/18/19 16:34	07/20/19 19:31	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/19 16:34	07/20/19 19:31	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/19 16:34	07/20/19 19:31	1
4-Nitroaniline	ND		10	2.5	ug/L		07/18/19 16:34	07/20/19 19:31	1
Nitrobenzene	ND		10	0.56	ug/L		07/18/19 16:34	07/20/19 19:31	1
2-Nitrophenol	ND		10	0.66	ug/L		07/18/19 16:34	07/20/19 19:31	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/19 16:34	07/20/19 19:31	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/19 16:34	07/20/19 19:31	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/19 16:34	07/20/19 19:31	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		07/18/19 16:34	07/20/19 19:31	1
Pentachlorophenol	ND		20	1.8	ug/L		07/18/19 16:34	07/20/19 19:31	1
Pyridine	ND		10	3.2	ug/L		07/18/19 16:34	07/20/19 19:31	1
Quinoline	ND		10	6.1	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/19 16:34	07/20/19 19:31	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/19 16:34	07/20/19 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*34 - 120*	*07/18/19 16:34*	*07/20/19 19:31*	*1*
2-Fluorophenol	*39*		*10 - 120*	*07/18/19 16:34*	*07/20/19 19:31*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*07/18/19 16:34*	*07/20/19 19:31*	*1*
Phenol-d5	*42*		*10 - 120*	*07/18/19 16:34*	*07/20/19 19:31*	*1*
Terphenyl-d14	*44*	*X*	*53 - 125*	*07/18/19 16:34*	*07/20/19 19:31*	*1*
2,4,6-Tribromophenol	*68*		*15 - 135*	*07/18/19 16:34*	*07/20/19 19:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	310		51	13	ug/L		07/18/19 16:34	07/24/19 03:41	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	0.0056	ug/L		07/22/19 15:26	07/23/19 09:33	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		07/22/19 15:26	07/23/19 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*07/22/19 15:26*	*07/23/19 09:33*	*1*

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

Job ID: 400-173195-1

Client Sample ID: P93A-ROX-071519
Date Collected: 07/15/19 11:10
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	U	500	200	ug/L			07/19/19 20:58	20
Acrolein	ND		400	200	ug/L			07/19/19 20:58	20
Acrylonitrile	ND		200	56	ug/L			07/19/19 20:58	20
Bromobenzene	ND		20	11	ug/L			07/19/19 20:58	20
Bromochloromethane	ND		20	10	ug/L			07/19/19 20:58	20
Bromodichloromethane	ND		20	10	ug/L			07/19/19 20:58	20
Bromoform	ND		100	14	ug/L			07/19/19 20:58	20
Bromomethane	ND		20	20	ug/L			07/19/19 20:58	20
2-Butanone (MEK)	ND		500	52	ug/L			07/19/19 20:58	20
Carbon disulfide	ND		20	10	ug/L			07/19/19 20:58	20
Carbon tetrachloride	ND		20	10	ug/L			07/19/19 20:58	20
Chlorobenzene	ND		20	10	ug/L			07/19/19 20:58	20
Dibromochloromethane	ND		20	10	ug/L			07/19/19 20:58	20
Chloroethane	ND		20	15	ug/L			07/19/19 20:58	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			07/19/19 20:58	20
Chloroform	ND		20	12	ug/L			07/19/19 20:58	20
1-Chlorohexane	ND		20	14	ug/L			07/19/19 20:58	20
Chloromethane	ND		20	17	ug/L			07/19/19 20:58	20
cis-1,2-Dichloroethene	ND		20	10	ug/L			07/19/19 20:58	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			07/19/19 20:58	20
1,2-Dichlorobenzene	ND		20	10	ug/L			07/19/19 20:58	20
1,3-Dichlorobenzene	ND		20	11	ug/L			07/19/19 20:58	20
1,4-Dichlorobenzene	ND		20	13	ug/L			07/19/19 20:58	20
Dichlorodifluoromethane	ND		20	17	ug/L			07/19/19 20:58	20
1,1-Dichloroethane	ND		20	10	ug/L			07/19/19 20:58	20
1,2-Dichloroethane	ND		20	10	ug/L			07/19/19 20:58	20
1,1-Dichloroethene	ND		20	10	ug/L			07/19/19 20:58	20
1,2-Dichloropropane	ND		20	10	ug/L			07/19/19 20:58	20
1,3-Dichloropropane	ND		20	10	ug/L			07/19/19 20:58	20
2,2-Dichloropropane	ND		20	10	ug/L			07/19/19 20:58	20
1,1-Dichloropropene	ND		20	10	ug/L			07/19/19 20:58	20
Ethylbenzene	ND		20	10	ug/L			07/19/19 20:58	20
Ethyl methacrylate	ND		20	12	ug/L			07/19/19 20:58	20
Hexachlorobutadiene	ND		100	18	ug/L			07/19/19 20:58	20
2-Hexanone	ND		500	62	ug/L			07/19/19 20:58	20
Isopropylbenzene	ND		20	11	ug/L			07/19/19 20:58	20
Methylene bromide	ND		100	12	ug/L			07/19/19 20:58	20
Methylene Chloride	ND		100	60	ug/L			07/19/19 20:58	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			07/19/19 20:58	20
Methyl tert-butyl ether	ND		20	15	ug/L			07/19/19 20:58	20
m-Xylene & p-Xylene	ND		100	32	ug/L			07/19/19 20:58	20
Naphthalene	ND		20	20	ug/L			07/19/19 20:58	20
n-Butylbenzene	ND		20	15	ug/L			07/19/19 20:58	20
N-Propylbenzene	ND		20	14	ug/L			07/19/19 20:58	20
o-Chlorotoluene	ND		20	11	ug/L			07/19/19 20:58	20
o-Xylene	ND		100	12	ug/L			07/19/19 20:58	20
p-Chlorotoluene	ND		20	11	ug/L			07/19/19 20:58	20
p-Isopropyltoluene	ND		20	14	ug/L			07/19/19 20:58	20
sec-Butylbenzene	ND		20	14	ug/L			07/19/19 20:58	20

Client Sample ID: P93A-ROX-071519

Lab Sample ID: 400-173195-6

Date Collected: 07/15/19 11:10
Date Received: 07/16/19 09:10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	U5	20	20	ug/L			07/19/19 20:58	20
tert-Butylbenzene	ND		20	13	ug/L			07/19/19 20:58	20
1,1,1,2-Tetrachloroethane	ND		20	10	ug/L			07/19/19 20:58	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			07/19/19 20:58	20
Tetrachloroethene	ND		20	12	ug/L			07/19/19 20:58	20
Toluene	ND		20	8.2	ug/L			07/19/19 20:58	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			07/19/19 20:58	20
trans-1,3-Dichloropropene	ND		100	10	ug/L			07/19/19 20:58	20
1,2,3-Trichlorobenzene	ND		20	14	ug/L			07/19/19 20:58	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			07/19/19 20:58	20
1,1,1-Trichloroethane	ND		20	10	ug/L			07/19/19 20:58	20
1,1,2-Trichloroethane	ND		100	10	ug/L			07/19/19 20:58	20
Trichloroethene	ND		20	10	ug/L			07/19/19 20:58	20
Trichlorofluoromethane	ND		20	10	ug/L			07/19/19 20:58	20
1,2,3-Trichloropropane	ND		100	17	ug/L			07/19/19 20:58	20
1,2,4-Trimethylbenzene	ND		20	16	ug/L			07/19/19 20:58	20
1,3,5-Trimethylbenzene	ND		20	11	ug/L			07/19/19 20:58	20
Vinyl acetate	ND		500	40	ug/L			07/19/19 20:58	20
Vinyl chloride	ND		20	10	ug/L			07/19/19 20:58	20
Xylenes, Total	ND		200	32	ug/L			07/19/19 20:58	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/19/19 20:58*	*20*
Dibromofluoromethane	*93*		*81 - 121*		*07/19/19 20:58*	*20*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/19/19 20:58*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	10000		50	19	ug/L			07/20/19 17:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/20/19 17:51*	*50*
Dibromofluoromethane	*93*		*81 - 121*		*07/20/19 17:51*	*50*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/20/19 17:51*	*50*

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		07/18/19 16:34	07/28/19 20:21	1
Acenaphthylene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:21	1
Anthracene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:21	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Chrysene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1
Fluoranthene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:21	1
Fluorene	ND		0.19	0.020	ug/L		07/18/19 16:34	07/28/19 20:21	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		07/18/19 16:34	07/28/19 20:21	1

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

Job ID: 400-173195-1

Client Sample ID: P93A-ROX-071519
Date Collected: 07/15/19 11:10
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-6
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		07/18/19 16:34	07/28/19 20:21	1
Pyrene	ND		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:21	1
1-Methylnaphthalene	0.75		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:21	1
2-Methylnaphthalene	0.12	J	0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*33 - 138*	*07/18/19 16:34*	*07/28/19 20:21*	*1*
2-Fluorobiphenyl	*87*		*15 - 122*	*07/18/19 16:34*	*07/28/19 20:21*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*07/18/19 16:34*	*07/28/19 20:21*	*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		07/18/19 16:34	07/20/19 19:52	1
Benzenethiol	ND	*	9.6	1.6	ug/L		07/18/19 16:34	07/20/19 19:52	1
Benzoic acid	ND		29	7.0	ug/L		07/18/19 16:34	07/20/19 19:52	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/18/19 16:34	07/20/19 19:52	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		07/18/19 16:34	07/20/19 19:52	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		07/18/19 16:34	07/20/19 19:52	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		07/18/19 16:34	07/20/19 19:52	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/18/19 16:34	07/20/19 19:52	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		07/18/19 16:34	07/20/19 19:52	1
Butyl benzyl phthalate	0.67	J	9.6	0.66	ug/L		07/18/19 16:34	07/20/19 19:52	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/18/19 16:34	07/20/19 19:52	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/18/19 16:34	07/20/19 19:52	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		07/18/19 16:34	07/20/19 19:52	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/18/19 16:34	07/20/19 19:52	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/18/19 16:34	07/20/19 19:52	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		07/18/19 16:34	07/20/19 19:52	1
Dibenzofuran	ND		9.6	0.50	ug/L		07/18/19 16:34	07/20/19 19:52	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/18/19 16:34	07/20/19 19:52	1
Diethyl phthalate	ND		9.6	0.67	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/18/19 16:34	07/20/19 19:52	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		07/18/19 16:34	07/20/19 19:52	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/18/19 16:34	07/20/19 19:52	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/18/19 16:34	07/20/19 19:52	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		07/18/19 16:34	07/20/19 19:52	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/18/19 16:34	07/20/19 19:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/18/19 16:34	07/20/19 19:52	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		07/18/19 16:34	07/20/19 19:52	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/18/19 16:34	07/20/19 19:52	1
Hexachloroethane	ND	*	9.6	4.0	ug/L		07/18/19 16:34	07/20/19 19:52	1
Indene	ND		9.6	0.96	ug/L		07/18/19 16:34	07/20/19 19:52	1
Isophorone	ND		9.6	0.55	ug/L		07/18/19 16:34	07/20/19 19:52	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/18/19 16:34	07/20/19 19:52	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/18/19 16:34	07/20/19 19:52	1

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

Job ID: 400-173195-1

Client Sample ID: P93A-ROX-071519
Date Collected: 07/15/19 11:10
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-6
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		07/18/19 16:34	07/20/19 19:52	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/18/19 16:34	07/20/19 19:52	1
4-Nitroaniline	ND		9.6	2.4	ug/L		07/18/19 16:34	07/20/19 19:52	1
Nitrobenzene	ND		9.6	0.53	ug/L		07/18/19 16:34	07/20/19 19:52	1
2-Nitrophenol	ND		9.6	0.63	ug/L		07/18/19 16:34	07/20/19 19:52	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/18/19 16:34	07/20/19 19:52	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/18/19 16:34	07/20/19 19:52	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/18/19 16:34	07/20/19 19:52	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		07/18/19 16:34	07/20/19 19:52	1
Pentachlorophenol	ND		19	1.7	ug/L		07/18/19 16:34	07/20/19 19:52	1
Phenol	48		9.6	2.5	ug/L		07/18/19 16:34	07/20/19 19:52	1
Pyridine	ND		9.6	3.1	ug/L		07/18/19 16:34	07/20/19 19:52	1
Quinoline	ND		9.6	5.8	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/18/19 16:34	07/20/19 19:52	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/18/19 16:34	07/20/19 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*07/18/19 16:34*	*07/20/19 19:52*	*1*
2-Fluorophenol	*40*		*10 - 120*	*07/18/19 16:34*	*07/20/19 19:52*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*07/18/19 16:34*	*07/20/19 19:52*	*1*
Phenol-d5	*59*		*10 - 120*	*07/18/19 16:34*	*07/20/19 19:52*	*1*
Terphenyl-d14	*64*		*53 - 125*	*07/18/19 16:34*	*07/20/19 19:52*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*07/18/19 16:34*	*07/20/19 19:52*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		07/22/19 15:26	07/23/19 09:56	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 15:26	07/23/19 09:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*07/22/19 15:26*	*07/23/19 09:56*	*1*

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

Job ID: 400-173195-1

Client Sample ID: P58-ROX-071519
Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-7
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			07/19/19 22:18	200
Acrolein	ND		4000	2000	ug/L			07/19/19 22:18	200
Acrylonitrile	ND		2000	560	ug/L			07/19/19 22:18	200
Bromobenzene	ND		200	110	ug/L			07/19/19 22:18	200
Bromochloromethane	ND		200	100	ug/L			07/19/19 22:18	200
Bromodichloromethane	ND		200	100	ug/L			07/19/19 22:18	200
Bromoform	ND		1000	140	ug/L			07/19/19 22:18	200
Bromomethane	ND		200	200	ug/L			07/19/19 22:18	200
2-Butanone (MEK)	ND		5000	520	ug/L			07/19/19 22:18	200
Carbon disulfide	ND		200	100	ug/L			07/19/19 22:18	200
Carbon tetrachloride	ND		200	100	ug/L			07/19/19 22:18	200
Chlorobenzene	ND		200	100	ug/L			07/19/19 22:18	200
Dibromochloromethane	ND		200	100	ug/L			07/19/19 22:18	200
Chloroethane	ND		200	150	ug/L			07/19/19 22:18	200
2-Chloroethyl vinyl ether	ND		1000	400	ug/L			07/19/19 22:18	200
Chloroform	ND		200	120	ug/L			07/19/19 22:18	200
1-Chlorohexane	ND		200	140	ug/L			07/19/19 22:18	200
Chloromethane	ND		200	170	ug/L			07/19/19 22:18	200
cis-1,2-Dichloroethene	ND		200	100	ug/L			07/19/19 22:18	200
cis-1,3-Dichloropropene	ND		1000	100	ug/L			07/19/19 22:18	200
1,2-Dichlorobenzene	ND		200	100	ug/L			07/19/19 22:18	200
1,3-Dichlorobenzene	ND		200	110	ug/L			07/19/19 22:18	200
1,4-Dichlorobenzene	ND		200	130	ug/L			07/19/19 22:18	200
Dichlorodifluoromethane	ND		200	170	ug/L			07/19/19 22:18	200
1,1-Dichloroethane	ND		200	100	ug/L			07/19/19 22:18	200
1,2-Dichloroethane	ND		200	100	ug/L			07/19/19 22:18	200
1,1-Dichloroethene	ND		200	100	ug/L			07/19/19 22:18	200
1,2-Dichloropropane	ND		200	100	ug/L			07/19/19 22:18	200
1,3-Dichloropropane	ND		200	100	ug/L			07/19/19 22:18	200
2,2-Dichloropropane	ND		200	100	ug/L			07/19/19 22:18	200
1,1-Dichloropropene	ND		200	100	ug/L			07/19/19 22:18	200
Ethylbenzene	140	J	200	100	ug/L			07/19/19 22:18	200
Ethyl methacrylate	ND		200	120	ug/L			07/19/19 22:18	200
Hexachlorobutadiene	ND		1000	180	ug/L			07/19/19 22:18	200
2-Hexanone	ND		5000	620	ug/L			07/19/19 22:18	200
Isopropylbenzene	ND		200	110	ug/L			07/19/19 22:18	200
Methylene bromide	ND		1000	120	ug/L			07/19/19 22:18	200
Methylene Chloride	ND		1000	600	ug/L			07/19/19 22:18	200
4-Methyl-2-pentanone (MIBK)	ND		5000	360	ug/L			07/19/19 22:18	200
Methyl tert-butyl ether	ND		200	150	ug/L			07/19/19 22:18	200
m-Xylene & p-Xylene	ND		1000	320	ug/L			07/19/19 22:18	200
Naphthalene	ND		200	200	ug/L			07/19/19 22:18	200
n-Butylbenzene	ND		200	150	ug/L			07/19/19 22:18	200
N-Propylbenzene	ND		200	140	ug/L			07/19/19 22:18	200
o-Chlorotoluene	ND		200	110	ug/L			07/19/19 22:18	200
o-Xylene	ND		1000	120	ug/L			07/19/19 22:18	200
p-Chlorotoluene	ND		200	110	ug/L			07/19/19 22:18	200
p-Isopropyltoluene	ND		200	140	ug/L			07/19/19 22:18	200
sec-Butylbenzene	ND		200	140	ug/L			07/19/19 22:18	200

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

Job ID: 400-173195-1

Client Sample ID: P58-ROX-071519
Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		200	200	ug/L			07/19/19 22:18	200
tert-Butylbenzene	ND		200	130	ug/L			07/19/19 22:18	200
1,1,1,2-Tetrachloroethane	ND		200	100	ug/L			07/19/19 22:18	200
1,1,2,2-Tetrachloroethane	ND		200	100	ug/L			07/19/19 22:18	200
Tetrachloroethene	ND		200	120	ug/L			07/19/19 22:18	200
Toluene	ND		200	82	ug/L			07/19/19 22:18	200
trans-1,2-Dichloroethene	ND		200	100	ug/L			07/19/19 22:18	200
trans-1,3-Dichloropropene	ND		1000	100	ug/L			07/19/19 22:18	200
1,2,3-Trichlorobenzene	ND		200	140	ug/L			07/19/19 22:18	200
1,2,4-Trichlorobenzene	ND		200	160	ug/L			07/19/19 22:18	200
1,1,1-Trichloroethane	ND		200	100	ug/L			07/19/19 22:18	200
1,1,2-Trichloroethane	ND		1000	100	ug/L			07/19/19 22:18	200
Trichloroethene	ND		200	100	ug/L			07/19/19 22:18	200
Trichlorofluoromethane	ND		200	100	ug/L			07/19/19 22:18	200
1,2,3-Trichloropropane	ND		1000	170	ug/L			07/19/19 22:18	200
1,2,4-Trimethylbenzene	ND		200	160	ug/L			07/19/19 22:18	200
1,3,5-Trimethylbenzene	ND		200	110	ug/L			07/19/19 22:18	200
Vinyl acetate	ND		5000	400	ug/L			07/19/19 22:18	200
Vinyl chloride	ND		200	100	ug/L			07/19/19 22:18	200
Xylenes, Total	ND		2000	320	ug/L			07/19/19 22:18	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*07/19/19 22:18*	*200*
Dibromofluoromethane	*95*		*81 - 121*		*07/19/19 22:18*	*200*
Toluene-d8 (Surr)	*110*		*80 - 120*		*07/19/19 22:18*	*200*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	87000		500	190	ug/L			07/20/19 20:03	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*07/20/19 20:03*	*500*
Dibromofluoromethane	*97*		*81 - 121*		*07/20/19 20:03*	*500*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/20/19 20:03*	*500*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND	J45	0.20	0.020	ug/L		07/18/19 16:34	07/30/19 23:20	1
Benzo[a]anthracene	0.79	J45	0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Benzo[a]pyrene	0.73	J	0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Benzo[b]fluoranthene	0.80		0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Benzo[g,h,i]perylene	ND		0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Benzo[k]fluoranthene	ND		0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Chrysene	1.4	J	0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Dibenz(a,h)anthracene	ND		0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Fluoranthene	0.41		0.20	0.020	ug/L		07/18/19 16:34	07/30/19 23:20	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.041	ug/L		07/18/19 16:34	07/30/19 23:20	1
Phenanthrene	2.4	J	0.20	0.020	ug/L		07/18/19 16:34	07/30/19 23:20	1
Pyrene	1.5	J	0.20	0.020	ug/L		07/18/19 16:34	07/30/19 23:20	1

Client Sample ID: P58-ROX-071519

Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	42		33 - 138	07/18/19 16:34	07/30/19 23:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.0	0.10	ug/L		07/18/19 16:34	07/30/19 23:39	5
Acenaphthylene	ND		1.0	0.10	ug/L		07/18/19 16:34	07/30/19 23:39	5
Fluorene	1.7	J	1.0	0.11	ug/L		07/18/19 16:34	07/30/19 23:39	5
1-Methylnaphthalene	59		1.0	0.10	ug/L		07/18/19 16:34	07/30/19 23:39	5
2-Methylnaphthalene	33		1.0	0.10	ug/L		07/18/19 16:34	07/30/19 23:39	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	50		15 - 122	07/18/19 16:34	07/30/19 23:39	5
Nitrobenzene-d5	155	X	19 - 130	07/18/19 16:34	07/30/19 23:39	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/18/19 16:34	07/20/19 20:13	1
Benzenethiol	ND	*	10	1.7	ug/L		07/18/19 16:34	07/20/19 20:13	1
Benzoic acid	ND		31	7.5	ug/L		07/18/19 16:34	07/20/19 20:13	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/19 16:34	07/20/19 20:13	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		07/18/19 16:34	07/20/19 20:13	1
Bis(2-chloroethyl)ether	ND		10	0.76	ug/L		07/18/19 16:34	07/20/19 20:13	1
bis (2-chloroisopropyl) ether	ND		10	0.83	ug/L		07/18/19 16:34	07/20/19 20:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/18/19 16:34	07/20/19 20:13	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		07/18/19 16:34	07/20/19 20:13	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		07/18/19 16:34	07/20/19 20:13	1
4-Chloroaniline	ND		10	3.5	ug/L		07/18/19 16:34	07/20/19 20:13	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/18/19 16:34	07/20/19 20:13	1
2-Chloronaphthalene	ND		10	0.53	ug/L		07/18/19 16:34	07/20/19 20:13	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/19 16:34	07/20/19 20:13	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/19 16:34	07/20/19 20:13	1
Dibenz[a,h]acridine	ND		10	3.1	ug/L		07/18/19 16:34	07/20/19 20:13	1
Dibenzofuran	ND		10	0.53	ug/L		07/18/19 16:34	07/20/19 20:13	1
3,3'-Dichlorobenzidine	ND	*	10	2.7	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/18/19 16:34	07/20/19 20:13	1
Diethyl phthalate	ND		10	0.72	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/18/19 16:34	07/20/19 20:13	1
Dimethyl phthalate	ND		10	0.61	ug/L		07/18/19 16:34	07/20/19 20:13	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/18/19 16:34	07/20/19 20:13	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/20/19 20:13	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		07/18/19 16:34	07/20/19 20:13	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/19 16:34	07/20/19 20:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/19 16:34	07/20/19 20:13	1
Hexachlorobenzene	ND		10	0.26	ug/L		07/18/19 16:34	07/20/19 20:13	1
Hexachlorocyclopentadiene	ND		20	2.7	ug/L		07/18/19 16:34	07/20/19 20:13	1
Hexachloroethane	ND	*	10	4.3	ug/L		07/18/19 16:34	07/20/19 20:13	1
Indene	ND		10	1.0	ug/L		07/18/19 16:34	07/20/19 20:13	1

Client Sample ID: P58-ROX-071519

Lab Sample ID: 400-173195-7

Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		10	0.58	ug/L		07/18/19 16:34	07/20/19 20:13	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/19 16:34	07/20/19 20:13	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		07/18/19 16:34	07/20/19 20:13	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/19 16:34	07/20/19 20:13	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/19 16:34	07/20/19 20:13	1
4-Nitroaniline	ND		10	2.5	ug/L		07/18/19 16:34	07/20/19 20:13	1
Nitrobenzene	ND		10	0.56	ug/L		07/18/19 16:34	07/20/19 20:13	1
2-Nitrophenol	ND		10	0.66	ug/L		07/18/19 16:34	07/20/19 20:13	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/19 16:34	07/20/19 20:13	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/18/19 16:34	07/20/19 20:13	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/18/19 16:34	07/20/19 20:13	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		07/18/19 16:34	07/20/19 20:13	1
Pentachlorophenol	ND		20	1.8	ug/L		07/18/19 16:34	07/20/19 20:13	1
Pyridine	ND		10	3.3	ug/L		07/18/19 16:34	07/20/19 20:13	1
Quinoline	ND		10	6.1	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/18/19 16:34	07/20/19 20:13	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/18/19 16:34	07/20/19 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*34 - 120*	*07/18/19 16:34*	*07/20/19 20:13*	*1*
2-Fluorophenol	*35*		*10 - 120*	*07/18/19 16:34*	*07/20/19 20:13*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*07/18/19 16:34*	*07/20/19 20:13*	*1*
Phenol-d5	*3*	*X*	*10 - 120*	*07/18/19 16:34*	*07/20/19 20:13*	*1*
Terphenyl-d14	*37*	*X*	*53 - 125*	*07/18/19 16:34*	*07/20/19 20:13*	*1*
2,4,6-Tribromophenol	*96*		*15 - 135*	*07/18/19 16:34*	*07/20/19 20:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	120		51	13	ug/L		07/18/19 16:34	07/24/19 04:02	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		07/22/19 15:26	07/23/19 10:18	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 15:26	07/23/19 10:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*07/22/19 15:26*	*07/23/19 10:18*	*1*

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

Job ID: 400-173195-1

Client Sample ID: P58-ROX-07519-DUP
Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-8
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			07/19/19 22:45	200
Acrolein	ND		4000	2000	ug/L			07/19/19 22:45	200
Acrylonitrile	ND		2000	560	ug/L			07/19/19 22:45	200
Bromobenzene	ND		200	110	ug/L			07/19/19 22:45	200
Bromochloromethane	ND		200	100	ug/L			07/19/19 22:45	200
Bromodichloromethane	ND		200	100	ug/L			07/19/19 22:45	200
Bromoform	ND		1000	140	ug/L			07/19/19 22:45	200
Bromomethane	ND		200	200	ug/L			07/19/19 22:45	200
2-Butanone (MEK)	ND		5000	520	ug/L			07/19/19 22:45	200
Carbon disulfide	ND		200	100	ug/L			07/19/19 22:45	200
Carbon tetrachloride	ND		200	100	ug/L			07/19/19 22:45	200
Chlorobenzene	ND		200	100	ug/L			07/19/19 22:45	200
Dibromochloromethane	ND		200	100	ug/L			07/19/19 22:45	200
Chloroethane	ND		200	150	ug/L			07/19/19 22:45	200
2-Chloroethyl vinyl ether	ND		1000	400	ug/L			07/19/19 22:45	200
Chloroform	ND		200	120	ug/L			07/19/19 22:45	200
1-Chlorohexane	ND		200	140	ug/L			07/19/19 22:45	200
Chloromethane	ND		200	170	ug/L			07/19/19 22:45	200
cis-1,2-Dichloroethene	ND		200	100	ug/L			07/19/19 22:45	200
cis-1,3-Dichloropropene	ND		1000	100	ug/L			07/19/19 22:45	200
1,2-Dichlorobenzene	ND		200	100	ug/L			07/19/19 22:45	200
1,3-Dichlorobenzene	ND		200	110	ug/L			07/19/19 22:45	200
1,4-Dichlorobenzene	ND		200	130	ug/L			07/19/19 22:45	200
Dichlorodifluoromethane	ND		200	170	ug/L			07/19/19 22:45	200
1,1-Dichloroethane	ND		200	100	ug/L			07/19/19 22:45	200
1,2-Dichloroethane	ND		200	100	ug/L			07/19/19 22:45	200
1,1-Dichloroethene	ND		200	100	ug/L			07/19/19 22:45	200
1,2-Dichloropropane	ND		200	100	ug/L			07/19/19 22:45	200
1,3-Dichloropropane	ND		200	100	ug/L			07/19/19 22:45	200
2,2-Dichloropropane	ND		200	100	ug/L			07/19/19 22:45	200
1,1-Dichloropropene	ND		200	100	ug/L			07/19/19 22:45	200
Ethylbenzene	130	J	200	100	ug/L			07/19/19 22:45	200
Ethyl methacrylate	ND		200	120	ug/L			07/19/19 22:45	200
Hexachlorobutadiene	ND		1000	180	ug/L			07/19/19 22:45	200
2-Hexanone	ND		5000	620	ug/L			07/19/19 22:45	200
Isopropylbenzene	ND		200	110	ug/L			07/19/19 22:45	200
Methylene bromide	ND		1000	120	ug/L			07/19/19 22:45	200
Methylene Chloride	ND		1000	600	ug/L			07/19/19 22:45	200
4-Methyl-2-pentanone (MIBK)	ND		5000	360	ug/L			07/19/19 22:45	200
Methyl tert-butyl ether	ND		200	150	ug/L			07/19/19 22:45	200
m-Xylene & p-Xylene	ND		1000	320	ug/L			07/19/19 22:45	200
Naphthalene	ND		200	200	ug/L			07/19/19 22:45	200
n-Butylbenzene	ND		200	150	ug/L			07/19/19 22:45	200
N-Propylbenzene	ND		200	140	ug/L			07/19/19 22:45	200
o-Chlorotoluene	ND		200	110	ug/L			07/19/19 22:45	200
o-Xylene	ND		1000	120	ug/L			07/19/19 22:45	200
p-Chlorotoluene	ND		200	110	ug/L			07/19/19 22:45	200
p-Isopropyltoluene	ND		200	140	ug/L			07/19/19 22:45	200
sec-Butylbenzene	ND		200	140	ug/L			07/19/19 22:45	200

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

Job ID: 400-173195-1

Client Sample ID: P58-ROX-07519-DUP

Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		200	200	ug/L			07/19/19 22:45	200
tert-Butylbenzene	ND		200	130	ug/L			07/19/19 22:45	200
1,1,1,2-Tetrachloroethane	ND		200	100	ug/L			07/19/19 22:45	200
1,1,2,2-Tetrachloroethane	ND		200	100	ug/L			07/19/19 22:45	200
Tetrachloroethene	ND		200	120	ug/L			07/19/19 22:45	200
Toluene	ND		200	82	ug/L			07/19/19 22:45	200
trans-1,2-Dichloroethene	ND		200	100	ug/L			07/19/19 22:45	200
trans-1,3-Dichloropropene	ND		1000	100	ug/L			07/19/19 22:45	200
1,2,3-Trichlorobenzene	ND		200	140	ug/L			07/19/19 22:45	200
1,2,4-Trichlorobenzene	ND		200	160	ug/L			07/19/19 22:45	200
1,1,1-Trichloroethane	ND		200	100	ug/L			07/19/19 22:45	200
1,1,2-Trichloroethane	ND		1000	100	ug/L			07/19/19 22:45	200
Trichloroethene	ND		200	100	ug/L			07/19/19 22:45	200
Trichlorofluoromethane	ND		200	100	ug/L			07/19/19 22:45	200
1,2,3-Trichloropropane	ND		1000	170	ug/L			07/19/19 22:45	200
1,2,4-Trimethylbenzene	ND		200	160	ug/L			07/19/19 22:45	200
1,3,5-Trimethylbenzene	ND		200	110	ug/L			07/19/19 22:45	200
Vinyl acetate	ND		5000	400	ug/L			07/19/19 22:45	200
Vinyl chloride	ND		200	100	ug/L			07/19/19 22:45	200
Xylenes, Total	ND		2000	320	ug/L			07/19/19 22:45	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*07/19/19 22:45*	*200*
Dibromofluoromethane	*94*		*81 - 121*		*07/19/19 22:45*	*200*
Toluene-d8 (Surr)	*107*		*80 - 120*		*07/19/19 22:45*	*200*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	86000		500	190	ug/L			07/20/19 20:29	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*07/20/19 20:29*	*500*
Dibromofluoromethane	*94*		*81 - 121*		*07/20/19 20:29*	*500*
Toluene-d8 (Surr)	*108*		*80 - 120*		*07/20/19 20:29*	*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		07/18/19 16:34	07/28/19 20:03	1
Acenaphthylene	0.52		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:03	1
Anthracene	1.3	J	0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:03	1
Benzo[a]anthracene	1.5	J	0.19	0.039	ug/L		07/18/19 16:34	07/28/19 20:03	1
Benzo[a]pyrene	1.4	J	0.19	0.039	ug/L		07/18/19 16:34	07/28/19 20:03	1
Benzo[b]fluoranthene	1.1		0.19	0.039	ug/L		07/18/19 16:34	07/28/19 20:03	1
Benzo[k]fluoranthene	0.21		0.19	0.039	ug/L		07/18/19 16:34	07/28/19 20:03	1
Chrysene	3.0	J	0.19	0.039	ug/L		07/18/19 16:34	07/28/19 20:03	1
Fluoranthene	0.68		0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:03	1
Fluorene	4.6	J	0.19	0.020	ug/L		07/18/19 16:34	07/28/19 20:03	1
Phenanthrene	4.1	J	0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:03	1
Pyrene	4.0	J	0.19	0.019	ug/L		07/18/19 16:34	07/28/19 20:03	1

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

Job ID: 400-173195-1

Client Sample ID: P58-ROX-07519-DUP

Lab Sample ID: 400-173195-8

Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	47		33 - 138	07/18/19 16:34	07/28/19 20:03	1
2-Fluorobiphenyl	64		15 - 122	07/18/19 16:34	07/28/19 20:03	1
Nitrobenzene-d5	155	X	19 - 130	07/18/19 16:34	07/28/19 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	0.84	J	0.97	0.19	ug/L		07/18/19 16:34	07/29/19 18:27	5
Dibenz(a,h)anthracene	ND		0.97	0.19	ug/L		07/18/19 16:34	07/29/19 18:27	5
Indeno[1,2,3-cd]pyrene	0.28	J	0.97	0.19	ug/L		07/18/19 16:34	07/29/19 18:27	5
1-Methylnaphthalene	59		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 18:27	5
2-Methylnaphthalene	40		0.97	0.097	ug/L		07/18/19 16:34	07/29/19 18:27	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/18/19 16:34	07/20/19 20:35	1
Benzenethiol	ND	*	9.7	1.6	ug/L		07/18/19 16:34	07/20/19 20:35	1
Benzoic acid	ND		29	7.1	ug/L		07/18/19 16:34	07/20/19 20:35	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 20:35	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		07/18/19 16:34	07/20/19 20:35	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		07/18/19 16:34	07/20/19 20:35	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		07/18/19 16:34	07/20/19 20:35	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/18/19 16:34	07/20/19 20:35	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		07/18/19 16:34	07/20/19 20:35	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		07/18/19 16:34	07/20/19 20:35	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/18/19 16:34	07/20/19 20:35	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/18/19 16:34	07/20/19 20:35	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		07/18/19 16:34	07/20/19 20:35	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/18/19 16:34	07/20/19 20:35	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 20:35	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		07/18/19 16:34	07/20/19 20:35	1
Dibenzofuran	ND		9.7	0.50	ug/L		07/18/19 16:34	07/20/19 20:35	1
3,3'-Dichlorobenzidine	ND	*	9.7	2.5	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/18/19 16:34	07/20/19 20:35	1
Diethyl phthalate	ND		9.7	0.68	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 20:35	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		07/18/19 16:34	07/20/19 20:35	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/18/19 16:34	07/20/19 20:35	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/18/19 16:34	07/20/19 20:35	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		07/18/19 16:34	07/20/19 20:35	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 20:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 20:35	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		07/18/19 16:34	07/20/19 20:35	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/18/19 16:34	07/20/19 20:35	1
Hexachloroethane	ND	*	9.7	4.1	ug/L		07/18/19 16:34	07/20/19 20:35	1
Indene	ND		9.7	0.97	ug/L		07/18/19 16:34	07/20/19 20:35	1
Isophorone	ND		9.7	0.55	ug/L		07/18/19 16:34	07/20/19 20:35	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/18/19 16:34	07/20/19 20:35	1

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

Job ID: 400-173195-1

Client Sample ID: P58-ROX-07519-DUP
Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	ND		19	1.0	ug/L		07/18/19 16:34	07/20/19 20:35	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/18/19 16:34	07/20/19 20:35	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/18/19 16:34	07/20/19 20:35	1
4-Nitroaniline	ND		9.7	2.4	ug/L		07/18/19 16:34	07/20/19 20:35	1
Nitrobenzene	ND		9.7	0.53	ug/L		07/18/19 16:34	07/20/19 20:35	1
2-Nitrophenol	ND		9.7	0.63	ug/L		07/18/19 16:34	07/20/19 20:35	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/18/19 16:34	07/20/19 20:35	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 20:35	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/18/19 16:34	07/20/19 20:35	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		07/18/19 16:34	07/20/19 20:35	1
Pentachlorophenol	ND		19	1.8	ug/L		07/18/19 16:34	07/20/19 20:35	1
Pyridine	ND		9.7	3.1	ug/L		07/18/19 16:34	07/20/19 20:35	1
Quinoline	ND		9.7	5.8	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/18/19 16:34	07/20/19 20:35	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/18/19 16:34	07/20/19 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*07/18/19 16:34*	*07/20/19 20:35*	*1*
2-Fluorophenol	*37*		*10 - 120*	*07/18/19 16:34*	*07/20/19 20:35*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*07/18/19 16:34*	*07/20/19 20:35*	*1*
Phenol-d5	*19*		*10 - 120*	*07/18/19 16:34*	*07/20/19 20:35*	*1*
Terphenyl-d14	*34*	*X*	*53 - 125*	*07/18/19 16:34*	*07/20/19 20:35*	*1*
2,4,6-Tribromophenol	*129*		*15 - 135*	*07/18/19 16:34*	*07/20/19 20:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	150		48	13	ug/L		07/18/19 16:34	07/24/19 04:24	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0058	ug/L		07/22/19 15:26	07/23/19 10:41	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		07/22/19 15:26	07/23/19 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*07/22/19 15:26*	*07/23/19 10:41*	*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.
*	RPD of the LCS and LCSD exceeds the control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: 400-173195-1

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)
400-173195-1	TB-ROX-071519-8260	110	98	104
400-173195-3	T12-ROX-071519	110	95	106
400-173195-4	P57-ROX-071519	109	91	107
400-173195-4 - DL	P57-ROX-071519	110	93	106
400-173195-5	P57-ROX-071519-DUP	109	90	109
400-173195-5 - DL	P57-ROX-071519-DUP	109	94	106
400-173195-6	P93A-ROX-071519	111	93	108
400-173195-6 - DL	P93A-ROX-071519	111	93	103
400-173195-7	P58-ROX-071519	110	95	110
400-173195-7 - DL	P58-ROX-071519	111	97	108
400-173195-8	P58-ROX-07519-DUP	108	94	107
400-173195-8 - DL	P58-ROX-07519-DUP	106	94	108
LCS 400-448672/1002	Lab Control Sample	116	98	96
LCS 400-448795/1002	Lab Control Sample	112	95	98
MB 400-448672/4	Method Blank	114	96	98
MB 400-448795/4	Method Blank	115	95	106

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)
400-173195-3	T12-ROX-071519	44	38	66	51	52 X	66
400-173195-4	P57-ROX-071519	52	43	68	43	49 X	77
400-173195-5	P57-ROX-071519-DUP	53	39	69	42	44 X	68
400-173195-6	P93A-ROX-071519	55	40	76	59	64	65
400-173195-7	P58-ROX-071519	49	35	66	3 X	37 X	96
400-173195-8	P58-ROX-07519-DUP	56	37	61	19	34 X	129
LCS 400-448615/2-A	Lab Control Sample	69	37	52	46	77	106
LCS 400-448615/4-A	Lab Control Sample	44	41	62	44	55	47
LCSD 400-448615/3-A	Lab Control Sample Dup	57	35	46	39	62	90
LCSD 400-448615/5-A	Lab Control Sample Dup	46	41	66	53	58	51
MB 400-448615/1-A	Method Blank	69	35	52	45	73	83

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-173195-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-173195-3	T12-ROX-071519		86	79
400-173195-3 - DL	T12-ROX-071519	125		
400-173195-4	P57-ROX-071519	109	79	55
400-173195-5	P57-ROX-071519-DUP	126	89	74
400-173195-6	P93A-ROX-071519	104	87	85
400-173195-7	P58-ROX-071519	42		
400-173195-7 - DL	P58-ROX-071519		50	155 X
400-173195-8	P58-ROX-07519-DUP	47	64	155 X
LCS 400-448615/2-A	Lab Control Sample	93	69	74
LCSD 400-448615/3-A	Lab Control Sample Dup	84	65	57
MB 400-448615/1-A	Method Blank	230 X	146 X	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)
400-173195-2	TB-ROX-071519-8011	94
400-173195-3	T12-ROX-071519	94
400-173195-4	P57-ROX-071519	99
400-173195-5	P57-ROX-071519-DUP	107
400-173195-6	P93A-ROX-071519	107
400-173195-7	P58-ROX-071519	115
400-173195-8	P58-ROX-07519-DUP	119
LCS 400-449012/2-A	Lab Control Sample	93
LCSD 400-449012/3-A	Lab Control Sample Dup	103
MB 400-449012/1-A	Method Blank	107

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-173195-1

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: 400-173195-1

Client Sample ID: TB-ROX-071519-8260

Date Collected: 07/15/19 00:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	448672	07/19/19 20:06	CAR	TAL PEN

Client Sample ID: TB-ROX-071519-8011

Date Collected: 07/15/19 00:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.7 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 08:25	DS	TAL PEN

Client Sample ID: T12-ROX-071519

Date Collected: 07/15/19 09:00
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	448672	07/19/19 20:32	CAR	TAL PEN
Total/NA	Prep	3520C			1035.2 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 18:49	VC1	TAL PEN
Total/NA	Prep	3520C			1035.2 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449114	07/23/19 19:03	KJA	TAL PEN
Total/NA	Prep	3520C	DL		1035.2 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			449887	07/29/19 17:19	KJA	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 08:47	DS	TAL PEN

Client Sample ID: P57-ROX-071519

Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Lab Sample ID: 400-173195-4
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		25	5 mL	5 mL	448672	07/19/19 21:26	CAR	TAL PEN
Total/NA	Analysis	8260B	DL	100	5 mL	5 mL	448795	07/20/19 18:18	RS	TAL PEN
Total/NA	Prep	3520C	DL		1032.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D	DL	5			449209	07/24/19 03:20	VC1	TAL PEN
Total/NA	Prep	3520C			1032.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 19:10	VC1	TAL PEN
Total/NA	Prep	3520C			1032.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			449887	07/29/19 17:36	KJA	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 09:10	DS	TAL PEN

Client Sample ID: P57-ROX-071519-DUP

Lab Sample ID: 400-173195-5

Date Collected: 07/15/19 09:55
Date Received: 07/16/19 09:10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	5 mL	5 mL	448672	07/19/19 21:52	CAR	TAL PEN
Total/NA	Analysis	8260B	DL	100	5 mL	5 mL	448795	07/20/19 18:44	RS	TAL PEN
Total/NA	Prep	3520C	DL		987.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D	DL	5			449209	07/24/19 03:41	VC1	TAL PEN
Total/NA	Prep	3520C			987.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 19:31	VC1	TAL PEN
Total/NA	Prep	3520C			987.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449114	07/23/19 19:37	KJA	TAL PEN
Total/NA	Prep	3520C	DL		987.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			450108	07/30/19 23:04	KJA	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 09:33	DS	TAL PEN

Client Sample ID: P93A-ROX-071519

Lab Sample ID: 400-173195-6

Date Collected: 07/15/19 11:10
Date Received: 07/16/19 09:10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	448672	07/19/19 20:58	CAR	TAL PEN
Total/NA	Analysis	8260B	DL	50	5 mL	5 mL	448795	07/20/19 17:51	RS	TAL PEN
Total/NA	Prep	3520C			1039.4 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 19:52	VC1	TAL PEN
Total/NA	Prep	3520C			1039.4 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449815	07/28/19 20:21	KJA	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 09:56	DS	TAL PEN

Client Sample ID: P58-ROX-071519

Lab Sample ID: 400-173195-7

Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	5 mL	5 mL	448672	07/19/19 22:18	CAR	TAL PEN
Total/NA	Analysis	8260B	DL	500	5 mL	5 mL	448795	07/20/19 20:03	RS	TAL PEN
Total/NA	Prep	3520C	DL		978.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D	DL	5			449209	07/24/19 04:02	VC1	TAL PEN
Total/NA	Prep	3520C			978.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 20:13	VC1	TAL PEN
Total/NA	Prep	3520C			978.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			450108	07/30/19 23:20	KJA	TAL PEN
Total/NA	Prep	3520C	DL		978.8 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			450108	07/30/19 23:39	KJA	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 10:18	DS	TAL PEN

Client Sample ID: P58-ROX-07519-DUP

Lab Sample ID: 400-173195-8

Date Collected: 07/15/19 12:05
Date Received: 07/16/19 09:10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	5 mL	5 mL	448672	07/19/19 22:45	CAR	TAL PEN
Total/NA	Analysis	8260B	DL	500	5 mL	5 mL	448795	07/20/19 20:29	RS	TAL PEN
Total/NA	Prep	3520C	DL		1033.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D	DL	5			449209	07/24/19 04:24	VC1	TAL PEN
Total/NA	Prep	3520C			1033.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 20:35	VC1	TAL PEN
Total/NA	Prep	3520C			1033.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449815	07/28/19 20:03	KJA	TAL PEN
Total/NA	Prep	3520C	DL		1033.6 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			449887	07/29/19 18:27	KJA	TAL PEN
Total/NA	Prep	8011			33.4 mL	35 mL	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 10:41	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448615/1-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 01:33	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			449114	07/23/19 16:26	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448672/4

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	448672	07/19/19 13:01	CAR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-448795/4

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	448795	07/20/19 10:49	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-449012/1-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	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 05:48	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448615/2-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 01:54	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			449114	07/23/19 16:42	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448615/4-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 15:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448672/1002**
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	448672	07/19/19 11:58	CAR	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-448795/1002**
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	448795	07/20/19 09:47	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-449012/2-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	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 06:10	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-448615/3-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			449209	07/24/19 02:16	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			449114	07/23/19 17:00	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-448615/5-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	448615	07/18/19 16:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			448802	07/20/19 15:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-449012/3-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	449012	07/22/19 15:26	DS	TAL PEN
Total/NA	Analysis	8011		1			449076	07/23/19 06:32	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 448672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-1	TB-ROX-071519-8260	Total/NA	Water	8260B	
400-173195-3	T12-ROX-071519	Total/NA	Water	8260B	
400-173195-4	P57-ROX-071519	Total/NA	Water	8260B	
400-173195-5	P57-ROX-071519-DUP	Total/NA	Water	8260B	
400-173195-6	P93A-ROX-071519	Total/NA	Water	8260B	
400-173195-7	P58-ROX-071519	Total/NA	Water	8260B	
400-173195-8	P58-ROX-07519-DUP	Total/NA	Water	8260B	
MB 400-448672/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448672/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 448795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-4 - DL	P57-ROX-071519	Total/NA	Water	8260B	
400-173195-5 - DL	P57-ROX-071519-DUP	Total/NA	Water	8260B	
400-173195-6 - DL	P93A-ROX-071519	Total/NA	Water	8260B	
400-173195-7 - DL	P58-ROX-071519	Total/NA	Water	8260B	
400-173195-8 - DL	P58-ROX-07519-DUP	Total/NA	Water	8260B	
MB 400-448795/4	Method Blank	Total/NA	Water	8260B	
LCS 400-448795/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 448615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-3	T12-ROX-071519	Total/NA	Water	3520C	
400-173195-3 - DL	T12-ROX-071519	Total/NA	Water	3520C	
400-173195-4 - DL	P57-ROX-071519	Total/NA	Water	3520C	
400-173195-4	P57-ROX-071519	Total/NA	Water	3520C	
400-173195-5 - DL	P57-ROX-071519-DUP	Total/NA	Water	3520C	
400-173195-5	P57-ROX-071519-DUP	Total/NA	Water	3520C	
400-173195-6	P93A-ROX-071519	Total/NA	Water	3520C	
400-173195-7 - DL	P58-ROX-071519	Total/NA	Water	3520C	
400-173195-7	P58-ROX-071519	Total/NA	Water	3520C	
400-173195-8 - DL	P58-ROX-07519-DUP	Total/NA	Water	3520C	
400-173195-8	P58-ROX-07519-DUP	Total/NA	Water	3520C	
MB 400-448615/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-448615/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-448615/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-448615/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-448615/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 448802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-3	T12-ROX-071519	Total/NA	Water	8270D	448615
400-173195-4	P57-ROX-071519	Total/NA	Water	8270D	448615
400-173195-5	P57-ROX-071519-DUP	Total/NA	Water	8270D	448615
400-173195-6	P93A-ROX-071519	Total/NA	Water	8270D	448615
400-173195-7	P58-ROX-071519	Total/NA	Water	8270D	448615
400-173195-8	P58-ROX-07519-DUP	Total/NA	Water	8270D	448615
LCS 400-448615/4-A	Lab Control Sample	Total/NA	Water	8270D	448615
LCSD 400-448615/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	448615

GC/MS Semi VOA

Analysis Batch: 449114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-3	T12-ROX-071519	Total/NA	Water	8270D LL	448615
400-173195-5	P57-ROX-071519-DUP	Total/NA	Water	8270D LL	448615
MB 400-448615/1-A	Method Blank	Total/NA	Water	8270D LL	448615
LCS 400-448615/2-A	Lab Control Sample	Total/NA	Water	8270D LL	448615
LCSD 400-448615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	448615

Analysis Batch: 449209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-4 - DL	P57-ROX-071519	Total/NA	Water	8270D	448615
400-173195-5 - DL	P57-ROX-071519-DUP	Total/NA	Water	8270D	448615
400-173195-7 - DL	P58-ROX-071519	Total/NA	Water	8270D	448615
400-173195-8 - DL	P58-ROX-07519-DUP	Total/NA	Water	8270D	448615
MB 400-448615/1-A	Method Blank	Total/NA	Water	8270D	448615
LCS 400-448615/2-A	Lab Control Sample	Total/NA	Water	8270D	448615
LCSD 400-448615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	448615

Analysis Batch: 449815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-6	P93A-ROX-071519	Total/NA	Water	8270D LL	448615
400-173195-8	P58-ROX-07519-DUP	Total/NA	Water	8270D LL	448615

Analysis Batch: 449887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-3 - DL	T12-ROX-071519	Total/NA	Water	8270D LL	448615
400-173195-4	P57-ROX-071519	Total/NA	Water	8270D LL	448615
400-173195-8 - DL	P58-ROX-07519-DUP	Total/NA	Water	8270D LL	448615

Analysis Batch: 450108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-5 - DL	P57-ROX-071519-DUP	Total/NA	Water	8270D LL	448615
400-173195-7	P58-ROX-071519	Total/NA	Water	8270D LL	448615
400-173195-7 - DL	P58-ROX-071519	Total/NA	Water	8270D LL	448615

GC Semi VOA

Prep Batch: 449012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-2	TB-ROX-071519-8011	Total/NA	Water	8011	
400-173195-3	T12-ROX-071519	Total/NA	Water	8011	
400-173195-4	P57-ROX-071519	Total/NA	Water	8011	
400-173195-5	P57-ROX-071519-DUP	Total/NA	Water	8011	
400-173195-6	P93A-ROX-071519	Total/NA	Water	8011	
400-173195-7	P58-ROX-071519	Total/NA	Water	8011	
400-173195-8	P58-ROX-07519-DUP	Total/NA	Water	8011	
MB 400-449012/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-449012/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-449012/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 449076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-2	TB-ROX-071519-8011	Total/NA	Water	8011	449012

GC Semi VOA (Continued)

Analysis Batch: 449076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-173195-3	T12-ROX-071519	Total/NA	Water	8011	449012
400-173195-4	P57-ROX-071519	Total/NA	Water	8011	449012
400-173195-5	P57-ROX-071519-DUP	Total/NA	Water	8011	449012
400-173195-6	P93A-ROX-071519	Total/NA	Water	8011	449012
400-173195-7	P58-ROX-071519	Total/NA	Water	8011	449012
400-173195-8	P58-ROX-07519-DUP	Total/NA	Water	8011	449012
MB 400-449012/1-A	Method Blank	Total/NA	Water	8011	449012
LCS 400-449012/2-A	Lab Control Sample	Total/NA	Water	8011	449012
LCSD 400-449012/3-A	Lab Control Sample Dup	Total/NA	Water	8011	449012

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

Job ID: 400-173195-1

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

Lab Sample ID: MB 400-448672/4
Matrix: Water
Analysis Batch: 448672

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/19 13:01	1
Acrolein	ND		20	10	ug/L			07/19/19 13:01	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/19 13:01	1
Benzene	ND		1.0	0.38	ug/L			07/19/19 13:01	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/19 13:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/19 13:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Bromoform	ND		5.0	0.71	ug/L			07/19/19 13:01	1
Bromomethane	1.07		1.0	0.98	ug/L			07/19/19 13:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/19 13:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/19 13:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/19 13:01	1
Chloroform	ND		1.0	0.60	ug/L			07/19/19 13:01	1
1-Chlorohexane	1.12		1.0	0.70	ug/L			07/19/19 13:01	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/19 13:01	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/19 13:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/19 13:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/19 13:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/19 13:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/19 13:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/19 13:01	1
2-Hexanone	ND		25	3.1	ug/L			07/19/19 13:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/19 13:01	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/19 13:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/19 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/19 13:01	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/19 13:01	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/19 13:01	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/19 13:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/19 13:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/19 13:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/19 13:01	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/19 13:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/19 13:01	1

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

Lab Sample ID: MB 400-448672/4
Matrix: Water
Analysis Batch: 448672

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/19 13:01	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/19 13:01	1
Styrene	ND		1.0	1.0	ug/L			07/19/19 13:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/19 13:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/19 13:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/19 13:01	1
Toluene	ND		1.0	0.41	ug/L			07/19/19 13:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/19 13:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/19 13:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/19 13:01	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/19 13:01	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/19 13:01	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/19 13:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/19 13:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/19 13:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/19 13:01	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/19 13:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/19 13:01	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/19 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*07/19/19 13:01*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*07/19/19 13:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/19/19 13:01*	*1*

Lab Sample ID: LCS 400-448672/1002
Matrix: Water
Analysis Batch: 448672

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	237		ug/L		118	43 - 160
Acrolein	500	619		ug/L		124	38 - 160
Acrylonitrile	500	508		ug/L		102	64 - 142
Benzene	50.0	47.7		ug/L		95	70 - 130
Bromobenzene	50.0	50.9		ug/L		102	70 - 132
Bromochloromethane	50.0	45.3		ug/L		91	70 - 130
Bromodichloromethane	50.0	46.2		ug/L		92	67 - 133
Bromoform	50.0	54.1		ug/L		108	57 - 140
Bromomethane	50.0	29.3		ug/L		59	10 - 160
2-Butanone (MEK)	200	284		ug/L		142	61 - 145
Carbon disulfide	50.0	39.4		ug/L		79	61 - 137
Carbon tetrachloride	50.0	43.0		ug/L		86	61 - 137
Chlorobenzene	50.0	47.8		ug/L		96	70 - 130
Dibromochloromethane	50.0	49.0		ug/L		98	67 - 135
Chloroethane	50.0	41.0		ug/L		82	55 - 141

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

Lab Sample ID: LCS 400-448672/1002
Matrix: Water
Analysis Batch: 448672

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	27.0		ug/L		54	10 - 160
Chloroform	50.0	45.7		ug/L		91	69 - 130
1-Chlorohexane	50.0	45.2		ug/L		90	69 - 130
Chloromethane	50.0	43.2		ug/L		86	58 - 137
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	68 - 130
cis-1,3-Dichloropropene	50.0	48.9		ug/L		98	69 - 132
1,2-Dichlorobenzene	50.0	47.6		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 130
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	44.5		ug/L		89	41 - 146
1,1-Dichloroethane	50.0	45.3		ug/L		91	70 - 130
1,2-Dichloroethane	50.0	46.8		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	41.9		ug/L		84	63 - 134
1,2-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
1,3-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	46.1		ug/L		92	70 - 130
Ethylbenzene	50.0	45.9		ug/L		92	70 - 130
Ethyl methacrylate	50.0	52.1		ug/L		104	68 - 130
Hexachlorobutadiene	50.0	58.5		ug/L		117	53 - 140
2-Hexanone	200	238		ug/L		119	65 - 137
Isopropylbenzene	50.0	45.9		ug/L		92	70 - 130
Methylene bromide	50.0	46.9		ug/L		94	70 - 130
Methylene Chloride	50.0	47.9		ug/L		96	66 - 135
4-Methyl-2-pentanone (MIBK)	200	205		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	48.2		ug/L		96	66 - 130
m-Xylene & p-Xylene	50.0	47.9		ug/L		96	70 - 130
Naphthalene	50.0	49.3		ug/L		99	47 - 149
n-Butylbenzene	50.0	47.2		ug/L		94	67 - 130
N-Propylbenzene	50.0	51.6		ug/L		103	70 - 130
o-Chlorotoluene	50.0	51.6		ug/L		103	70 - 130
o-Xylene	50.0	46.1		ug/L		92	70 - 130
p-Chlorotoluene	50.0	52.4		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	50.7		ug/L		101	65 - 130
sec-Butylbenzene	50.0	51.2		ug/L		102	66 - 130
Styrene	50.0	43.6		ug/L		87	70 - 130
tert-Butylbenzene	50.0	49.9		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	61.7		ug/L		123	70 - 131
Tetrachloroethene	50.0	42.4		ug/L		85	65 - 130
Toluene	50.0	46.8		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	45.4		ug/L		91	70 - 130
trans-1,3-Dichloropropene	50.0	48.6		ug/L		97	63 - 130
1,2,3-Trichlorobenzene	50.0	51.5		ug/L		103	60 - 138
1,2,4-Trichlorobenzene	50.0	51.1		ug/L		102	60 - 140
1,1,1-Trichloroethane	50.0	43.2		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	49.2		ug/L		98	70 - 130
Trichloroethene	50.0	46.7		ug/L		93	70 - 130
Trichlorofluoromethane	50.0	42.7		ug/L		85	65 - 138

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

Lab Sample ID: LCS 400-448672/1002
Matrix: Water
Analysis Batch: 448672

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	58.7		ug/L		117	70 - 130
1,2,4-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	53.4		ug/L		107	69 - 130
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	47.0		ug/L		94	59 - 136
Xylenes, Total	100	94.1		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 400-448795/4
Matrix: Water
Analysis Batch: 448795

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.38	ug/L			07/20/19 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*78 - 118*		*07/20/19 10:49*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*07/20/19 10:49*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/20/19 10:49*	*1*

Lab Sample ID: LCS 400-448795/1002
Matrix: Water
Analysis Batch: 448795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	50.4		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
Benzenethiol	ND		10	1.7	ug/L		07/18/19 16:34	07/24/19 01:33	1
Benzoic acid	ND		30	7.3	ug/L		07/18/19 16:34	07/24/19 01:33	1
Benzyl alcohol	ND		10	2.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		07/18/19 16:34	07/24/19 01:33	1

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		07/18/19 16:34	07/24/19 01:33	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		07/18/19 16:34	07/24/19 01:33	1
Bis(2-ethylhexyl) phthalate	8.53	J	10	5.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		07/18/19 16:34	07/24/19 01:33	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Chloroaniline	ND		10	3.4	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Chloronaphthalene	ND		10	0.52	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Chlorophenol	ND		10	2.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Dibenzofuran	ND		10	0.52	ug/L		07/18/19 16:34	07/24/19 01:33	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Diethyl phthalate	ND		10	0.70	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/18/19 16:34	07/24/19 01:33	1
Dimethyl phthalate	ND		10	0.60	ug/L		07/18/19 16:34	07/24/19 01:33	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/18/19 16:34	07/24/19 01:33	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/18/19 16:34	07/24/19 01:33	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		07/18/19 16:34	07/24/19 01:33	1
1,4-Dioxane	ND		10	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Hexachlorobenzene	ND		10	0.25	ug/L		07/18/19 16:34	07/24/19 01:33	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/18/19 16:34	07/24/19 01:33	1
Hexachloroethane	ND		10	4.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
Indene	ND		10	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
Isophorone	ND		10	0.57	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Methylphenol	ND		10	1.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Nitroaniline	ND		10	2.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
3-Nitroaniline	ND		10	1.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Nitroaniline	ND		10	2.5	ug/L		07/18/19 16:34	07/24/19 01:33	1
Nitrobenzene	ND		10	0.55	ug/L		07/18/19 16:34	07/24/19 01:33	1
2-Nitrophenol	ND		10	0.65	ug/L		07/18/19 16:34	07/24/19 01:33	1
4-Nitrophenol	ND		10	2.1	ug/L		07/18/19 16:34	07/24/19 01:33	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/18/19 16:34	07/24/19 01:33	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/18/19 16:34	07/24/19 01:33	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		07/18/19 16:34	07/24/19 01:33	1
Pentachlorophenol	ND		20	1.8	ug/L		07/18/19 16:34	07/24/19 01:33	1
Phenol	ND		10	2.6	ug/L		07/18/19 16:34	07/24/19 01:33	1
Pyridine	ND		10	3.2	ug/L		07/18/19 16:34	07/24/19 01:33	1
Quinoline	ND		10	6.0	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/18/19 16:34	07/24/19 01:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/19 16:34	07/24/19 01:33	1

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		34 - 120	07/18/19 16:34	07/24/19 01:33	1
2-Fluorophenol	35		10 - 120	07/18/19 16:34	07/24/19 01:33	1
Nitrobenzene-d5	52		27 - 120	07/18/19 16:34	07/24/19 01:33	1
Phenol-d5	45		10 - 120	07/18/19 16:34	07/24/19 01:33	1
Terphenyl-d14	73		53 - 125	07/18/19 16:34	07/24/19 01:33	1
2,4,6-Tribromophenol	83		15 - 135	07/18/19 16:34	07/24/19 01:33	1

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	15.5		ug/L		52	29 - 120
Benzoic acid	117	25.0	J	ug/L		21	10 - 150
Benzyl alcohol	30.0	17.3		ug/L		58	19 - 125
Bis(2-chloroethoxy)methane	30.0	15.1		ug/L		50	45 - 120
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120
bis (2-chloroisopropyl) ether	30.0	13.9		ug/L		46	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	17.8		ug/L		59	48 - 150
4-Bromophenyl phenyl ether	30.0	27.3		ug/L		91	55 - 122
Butyl benzyl phthalate	30.0	15.6		ug/L		52	46 - 145
4-Chloroaniline	30.0	13.5		ug/L		45	30 - 120
4-Chloro-3-methylphenol	30.0	19.8		ug/L		66	39 - 140
2-Chloronaphthalene	30.0	19.6		ug/L		65	52 - 120
2-Chlorophenol	30.0	17.5		ug/L		58	34 - 120
4-Chlorophenyl phenyl ether	30.0	23.9		ug/L		80	58 - 124
Dibenz[a,h]acridine	30.0	22.4		ug/L		75	46 - 149
Dibenzofuran	30.0	21.0		ug/L		70	58 - 123
3,3'-Dichlorobenzidine	40.0	57.6	*	ug/L		144	39 - 135
2,4-Dichlorophenol	30.0	20.6		ug/L		69	39 - 128
Diethyl phthalate	30.0	22.5		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	19.3		ug/L		64	44 - 120
Dimethyl phthalate	30.0	22.2		ug/L		74	50 - 131
Di-n-butyl phthalate	30.0	20.6		ug/L		69	55 - 131
4,6-Dinitro-ortho-cresol	60.0	49.2		ug/L		82	10 - 150
2,4-Dinitrophenol	60.0	60.8		ug/L		101	10 - 150
2,4-Dinitrotoluene	30.0	23.4		ug/L		78	58 - 140
2,6-Dinitrotoluene	30.0	23.2		ug/L		77	57 - 130
Di-n-octyl phthalate	30.0	19.9		ug/L		66	50 - 150
1,4-Dioxane	30.0	11.7		ug/L		39	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	16.0		ug/L		53	47 - 123
Hexachlorobenzene	30.0	29.8		ug/L		99	52 - 131
Hexachlorocyclopentadiene	30.0	8.59	J	ug/L		29	10 - 129
Hexachloroethane	30.0	12.4		ug/L		41	41 - 120
Indene	30.0	16.8		ug/L		56	47 - 120
Isophorone	30.0	16.3		ug/L		54	49 - 120
2-Methylphenol	30.0	17.6		ug/L		59	39 - 123
3 & 4 Methylphenol	30.0	17.6	J	ug/L		59	38 - 121

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

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	30.0	18.9		ug/L		63	47 - 150
3-Nitroaniline	30.0	21.4		ug/L		71	34 - 132
4-Nitroaniline	30.0	29.8		ug/L		99	41 - 135
Nitrobenzene	30.0	16.1		ug/L		54	47 - 120
2-Nitrophenol	30.0	18.3		ug/L		61	28 - 136
4-Nitrophenol	60.0	41.0		ug/L		68	10 - 150
N-Nitrosodimethylamine	30.0	21.2		ug/L		71	22 - 148
N-Nitrosodi-n-propylamine	30.0	18.5		ug/L		62	44 - 120
N-Nitrosodiphenylamine	29.8	22.0		ug/L		74	56 - 120
Pentachlorophenol	60.0	51.6		ug/L		86	15 - 141
Phenol	30.0	13.6		ug/L		45	33 - 120
Pyridine	60.0	27.2		ug/L		45	26 - 120
Quinoline	30.0	18.3		ug/L		61	51 - 129
2,4,5-Trichlorophenol	30.0	23.6		ug/L		79	38 - 147
2,4,6-Trichlorophenol	30.0	23.2		ug/L		77	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*106*		*15 - 135*

Lab Sample ID: LCS 400-448615/4-A
Matrix: Water
Analysis Batch: 448802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	12.9		ug/L		43	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*44*		*34 - 120*
2-Fluorophenol	*41*		*10 - 120*
Nitrobenzene-d5	*62*		*27 - 120*
Phenol-d5	*44*		*10 - 120*
Terphenyl-d14	*55*		*53 - 125*
2,4,6-Tribromophenol	*47*		*15 - 135*

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	14.5		ug/L		48	29 - 120	7	30
Benzoic acid	117	25.9	J	ug/L		22	10 - 150	4	30
Benzyl alcohol	30.0	17.2		ug/L		57	19 - 125	1	30
Bis(2-chloroethoxy)methane	30.0	15.1		ug/L		50	45 - 120	0	30

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

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	30.0	14.4		ug/L		48	48 - 120	4	30
bis (2-chloroisopropyl) ether	30.0	13.3		ug/L		44	30 - 125	4	30
Bis(2-ethylhexyl) phthalate	30.0	19.0		ug/L		63	48 - 150	7	30
4-Bromophenyl phenyl ether	30.0	25.4		ug/L		85	55 - 122	7	30
Butyl benzyl phthalate	30.0	14.4		ug/L		48	46 - 145	8	30
4-Chloroaniline	30.0	13.7		ug/L		46	30 - 120	1	30
4-Chloro-3-methylphenol	30.0	19.2		ug/L		64	39 - 140	3	30
2-Chloronaphthalene	30.0	19.5		ug/L		65	52 - 120	0	30
2-Chlorophenol	30.0	17.2		ug/L		57	34 - 120	2	30
4-Chlorophenyl phenyl ether	30.0	23.4		ug/L		78	58 - 124	2	30
Dibenz[a,h]acridine	30.0	21.4		ug/L		71	46 - 149	5	30
Dibenzofuran	30.0	20.4		ug/L		68	58 - 123	3	30
3,3'-Dichlorobenzidine	40.0	55.3	*	ug/L		138	39 - 135	4	30
2,4-Dichlorophenol	30.0	20.4		ug/L		68	39 - 128	1	30
Diethyl phthalate	30.0	21.4		ug/L		71	44 - 146	5	30
2,4-Dimethylphenol	30.0	18.7		ug/L		62	44 - 120	3	30
Dimethyl phthalate	30.0	21.0		ug/L		70	50 - 131	5	30
Di-n-butyl phthalate	30.0	19.7		ug/L		66	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	48.2		ug/L		80	10 - 150	2	30
2,4-Dinitrophenol	60.0	63.6		ug/L		106	10 - 150	5	30
2,4-Dinitrotoluene	30.0	22.3		ug/L		74	58 - 140	5	30
2,6-Dinitrotoluene	30.0	22.5		ug/L		75	57 - 130	3	30
Di-n-octyl phthalate	30.0	18.7		ug/L		62	50 - 150	6	30
1,4-Dioxane	30.0	10.9		ug/L		36	25 - 120	7	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	15.6		ug/L		52	47 - 123	2	30
Hexachlorobenzene	30.0	28.0		ug/L		93	52 - 131	6	30
Hexachlorocyclopentadiene	30.0	8.83	J	ug/L		29	10 - 129	3	30
Hexachloroethane	30.0	11.9	*	ug/L		40	41 - 120	4	30
Indene	30.0	15.9		ug/L		53	47 - 120	5	30
Isophorone	30.0	16.3		ug/L		54	49 - 120	0	30
2-Methylphenol	30.0	16.6		ug/L		55	39 - 123	6	30
3 & 4 Methylphenol	30.0	16.9	J	ug/L		56	38 - 121	4	30
2-Nitroaniline	30.0	18.1		ug/L		60	47 - 150	4	30
3-Nitroaniline	30.0	20.0		ug/L		67	34 - 132	7	30
4-Nitroaniline	30.0	28.3		ug/L		94	41 - 135	5	30
Nitrobenzene	30.0	16.5		ug/L		55	47 - 120	2	30
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136	0	30
4-Nitrophenol	60.0	40.5		ug/L		67	10 - 150	1	30
N-Nitrosodimethylamine	30.0	18.9		ug/L		63	22 - 148	12	30
N-Nitrosodi-n-propylamine	30.0	17.9		ug/L		60	44 - 120	3	30
N-Nitrosodiphenylamine	29.8	20.6		ug/L		69	56 - 120	6	30
Pentachlorophenol	60.0	49.7		ug/L		83	15 - 141	4	30
Phenol	30.0	13.3		ug/L		44	33 - 120	2	30
Pyridine	60.0	26.4		ug/L		44	26 - 120	3	30
Quinoline	30.0	19.3		ug/L		64	51 - 129	5	30
2,4,5-Trichlorophenol	30.0	22.8		ug/L		76	38 - 147	3	30
2,4,6-Trichlorophenol	30.0	22.2		ug/L		74	36 - 139	4	30

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

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	57		34 - 120
2-Fluorophenol	35		10 - 120
Nitrobenzene-d5	46		27 - 120
Phenol-d5	39		10 - 120
Terphenyl-d14	62		53 - 125
2,4,6-Tribromophenol	90		15 - 135

Lab Sample ID: LCSD 400-448615/5-A
Matrix: Water
Analysis Batch: 448802

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol			30.0	ND	*	ug/L		4	10 - 120	165	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	46		34 - 120
2-Fluorophenol	41		10 - 120
Nitrobenzene-d5	66		27 - 120
Phenol-d5	53		10 - 120
Terphenyl-d14	58		53 - 125
2,4,6-Tribromophenol	51		15 - 135

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Acenaphthylene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Anthracene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Chrysene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Fluoranthene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Fluorene	ND		0.20	0.021	ug/L		07/18/19 16:34	07/23/19 16:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		07/18/19 16:34	07/23/19 16:26	1
Phenanthrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
Pyrene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		07/18/19 16:34	07/23/19 16:26	1

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

Lab Sample ID: MB 400-448615/1-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 448615

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	230	X	33 - 138	07/18/19 16:34	07/23/19 16:26	1
2-Fluorobiphenyl	146	X	15 - 122	07/18/19 16:34	07/23/19 16:26	1
Nitrobenzene-d5	115		19 - 130	07/18/19 16:34	07/23/19 16:26	1

Lab Sample ID: LCS 400-448615/2-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.5		ug/L		85	41 - 120
Acenaphthylene	30.0	24.3		ug/L		81	44 - 120
Anthracene	30.0	24.6		ug/L		82	49 - 120
Benzo[a]anthracene	30.0	22.1		ug/L		74	61 - 135
Benzo[a]pyrene	30.0	23.6		ug/L		79	52 - 120
Benzo[b]fluoranthene	30.0	24.8		ug/L		83	53 - 134
Benzo[g,h,i]perylene	30.0	16.3		ug/L		54	47 - 133
Benzo[k]fluoranthene	30.0	26.6		ug/L		89	57 - 134
Chrysene	30.0	21.5		ug/L		72	55 - 122
Dibenz(a,h)anthracene	30.0	18.9		ug/L		63	48 - 146
Fluoranthene	30.0	22.2		ug/L		74	54 - 128
Fluorene	30.0	30.9		ug/L		103	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	18.2		ug/L		61	43 - 142
Phenanthrene	30.0	25.4		ug/L		85	48 - 120
Pyrene	30.0	27.6		ug/L		92	48 - 132
1-Methylnaphthalene	30.0	17.5		ug/L		58	41 - 120
2-Methylnaphthalene	30.0	17.2		ug/L		57	32 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	93		33 - 138
2-Fluorobiphenyl	69		15 - 122
Nitrobenzene-d5	74		19 - 130

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.8		ug/L		99	41 - 120	15	56
Acenaphthylene	30.0	27.5		ug/L		92	44 - 120	12	56
Anthracene	30.0	29.9		ug/L		100	49 - 120	19	51
Benzo[a]anthracene	30.0	26.7		ug/L		89	61 - 135	19	49
Benzo[a]pyrene	30.0	28.0		ug/L		93	52 - 120	17	50
Benzo[b]fluoranthene	30.0	28.7		ug/L		96	53 - 134	15	54
Benzo[g,h,i]perylene	30.0	17.2		ug/L		57	47 - 133	5	50
Benzo[k]fluoranthene	30.0	34.1		ug/L		114	57 - 134	24	52
Chrysene	30.0	26.7		ug/L		89	55 - 122	22	50
Dibenz(a,h)anthracene	30.0	21.3		ug/L		71	48 - 146	12	50
Fluoranthene	30.0	28.6		ug/L		95	54 - 128	25	52

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

Lab Sample ID: LCSD 400-448615/3-A
Matrix: Water
Analysis Batch: 449114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 448615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluorene	30.0	35.6		ug/L		119	45 - 125	14	56
Indeno[1,2,3-cd]pyrene	30.0	20.3		ug/L		68	43 - 142	11	51
Phenanthrene	30.0	30.0		ug/L		100	48 - 120	17	56
Pyrene	30.0	32.6		ug/L		109	48 - 132	17	52
1-Methylnaphthalene	30.0	20.2		ug/L		67	41 - 120	14	55
2-Methylnaphthalene	30.0	20.0		ug/L		67	32 - 124	15	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*84*		*33 - 138*
2-Fluorobiphenyl	*65*		*15 - 122*
Nitrobenzene-d5	*57*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-449012/1-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449012

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		07/22/19 15:26	07/23/19 05:48	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		07/22/19 15:26	07/23/19 05:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*07/22/19 15:26*	*07/23/19 05:48*	*1*

Lab Sample ID: LCS 400-449012/2-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449012

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.119		ug/L		119	60 - 140
1,2-Dibromoethane	0.100	0.0953		ug/L		95	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*51 - 149*

Lab Sample ID: LCSD 400-449012/3-A
Matrix: Water
Analysis Batch: 449076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449012

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.130		ug/L		130	60 - 140	9	30
1,2-Dibromoethane	0.100	0.105		ug/L		105	60 - 140	10	30

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 # 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**
60592794 - 1.03.003 / 60592794 - 1 03.0033	USPC/00114/R/02

☐CHECK IF NO INCIDENT # APPLIES
DATE: 7/15/19
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
60592794 - 1.03.003 / 60592794 - 1.03.0033
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): B Howell T. Jones
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑STANDARD (14 DAY) ☐5 DAYS ☐3 DAYS ☐2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND

☐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 60592794 - 1.03.003: VOC 8260; SVOC 8270
UNIT COST 60592794 - 1.03.0033: VOC 8011; PAH 8270LL

00-173195 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-071519-8260	7/15/19	0000	Water	X					2				
	TB-Rox-071519-8011				X					2				
	T12-Rox 071519		9		X			X		6	2	1	2	1
	P5 7519				X			X		6	2	1	2	1
	P 07 9 D				X			X		6		1	2	1
	P9 X 59				X			X		6	2	1	2	1
	8 8 R 9		1205		X			X		6	2		2	1
	8 X				X			X		6	2	1	2	1

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Relinquished by (Signature)	Received by (Signature)	Date	Time
Bob Hauff	Fedex: 4782 2880 5765 4782 2880 5776	1	1800
Relinquished by (Signature)	Received by (Signature)	Date	Time
Relinquished by (Signature)	Received by (Signature) JR	Date 1/19	Time 1

Custody Seal #'s: 819090, 819091, 819092, 819093

Version 14Dec15

08/1/2019

13

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-173195-1
SDG Number:

Login Number: 173195
List Number: 1
Creator: Perez, Trina M

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	1.7°C, 1.1°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-173195-1
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	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19 *
Florida	NELAP	4	E81010	06-30-20 *
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19 *
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

* 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

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

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

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
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

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

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	0.008

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-1

HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

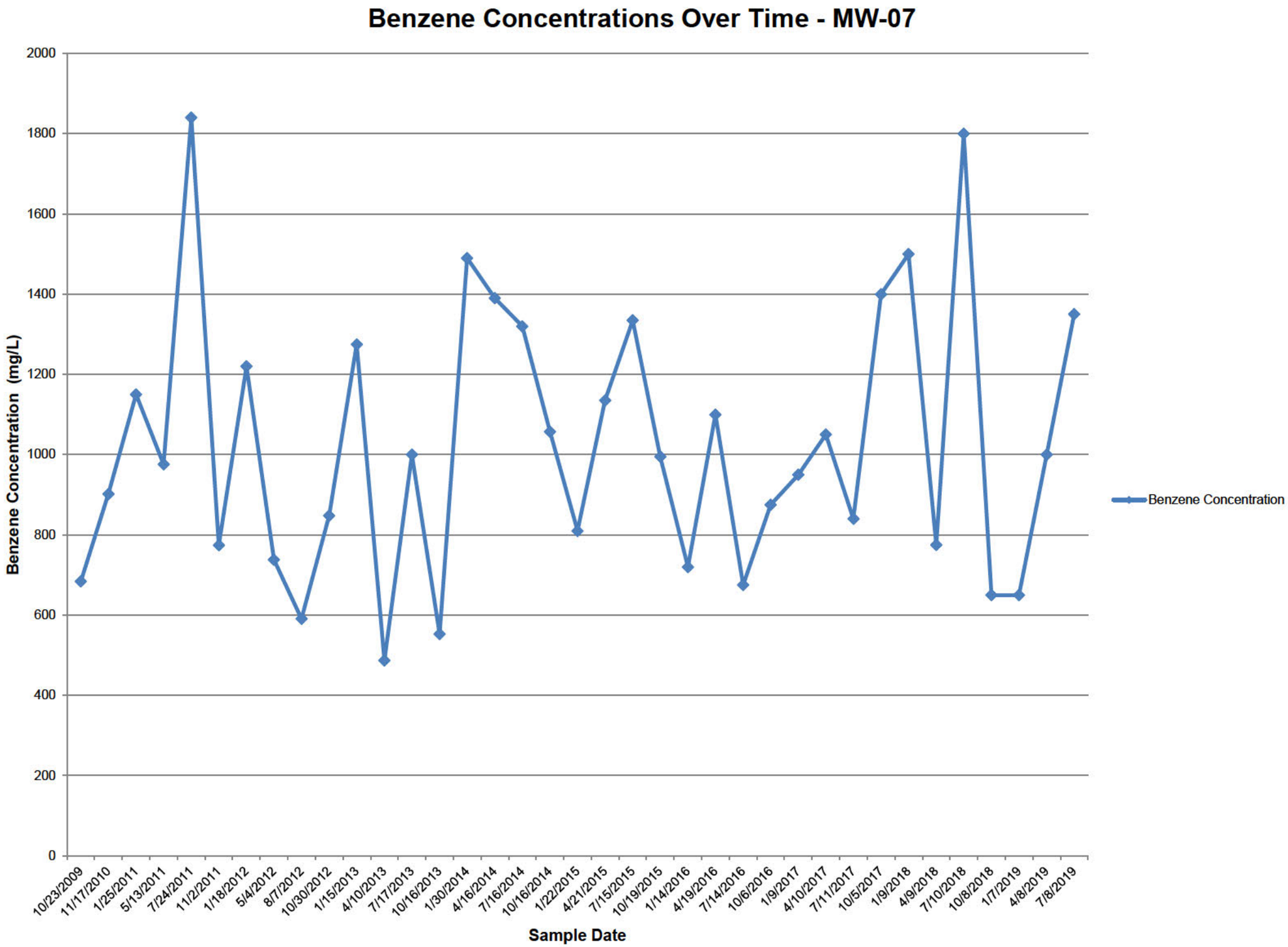
Location	Sample Date	Result (ug/L)
T-12	10/1/2010	2.87
	10/22/2010	4.674
	5/11/2011	2
	10/27/2011	1.09
	10/27/2011	1.4
	1/19/2012	1.51
	5/9/2012	1.7
	5/9/2012	1.48
	8/2/2012	1.64
	11/5/2012	2
	11/5/2012	2
	11/5/2012	1.71
	1/18/2013	2.03
	4/15/2013	2.2
	4/15/2013	2.2
	4/15/2013	1.61
	7/16/2013	1.65
	10/15/2013	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

Notes:

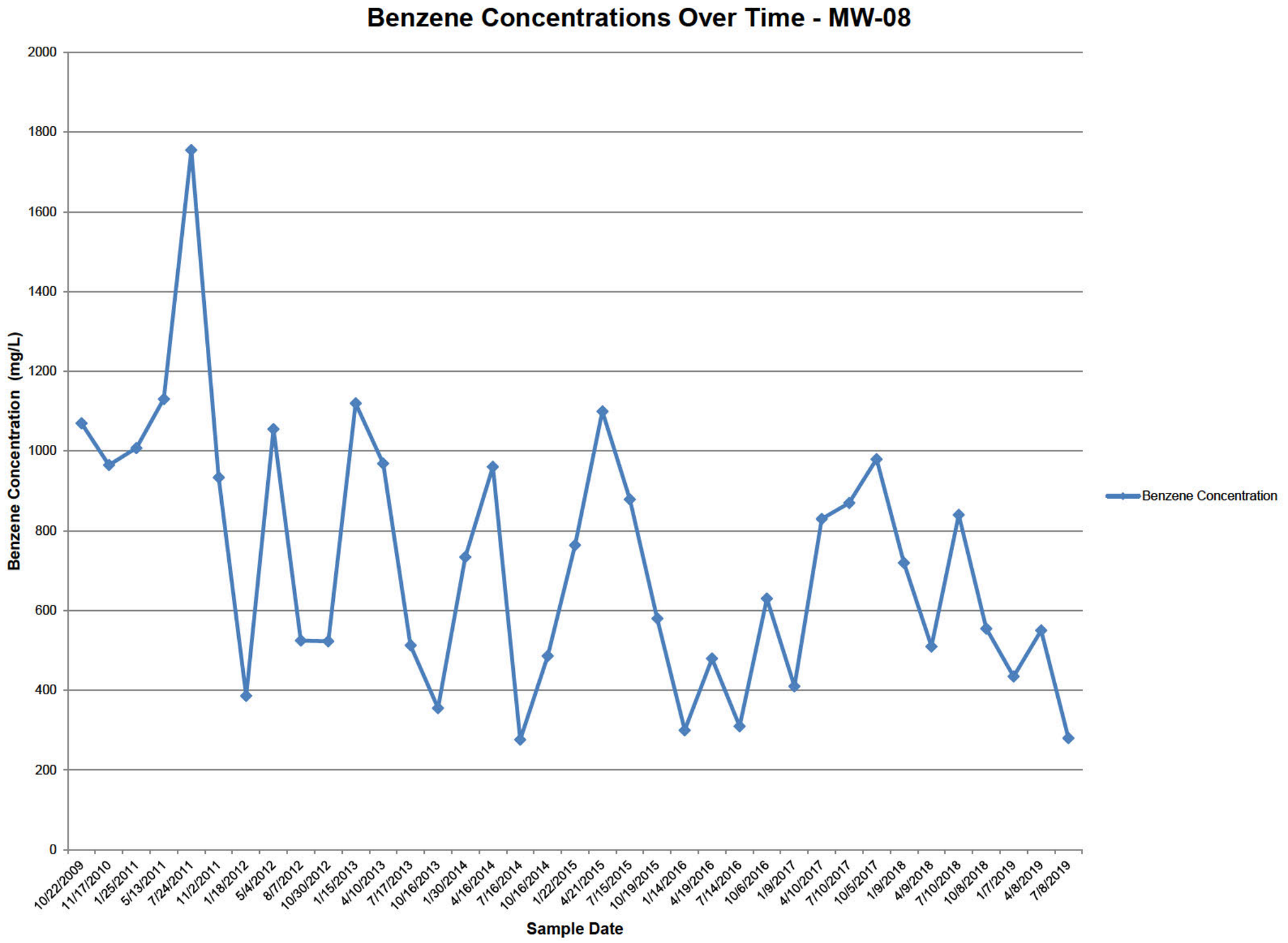
mg/L = milligrams per liter

ND = non-detect

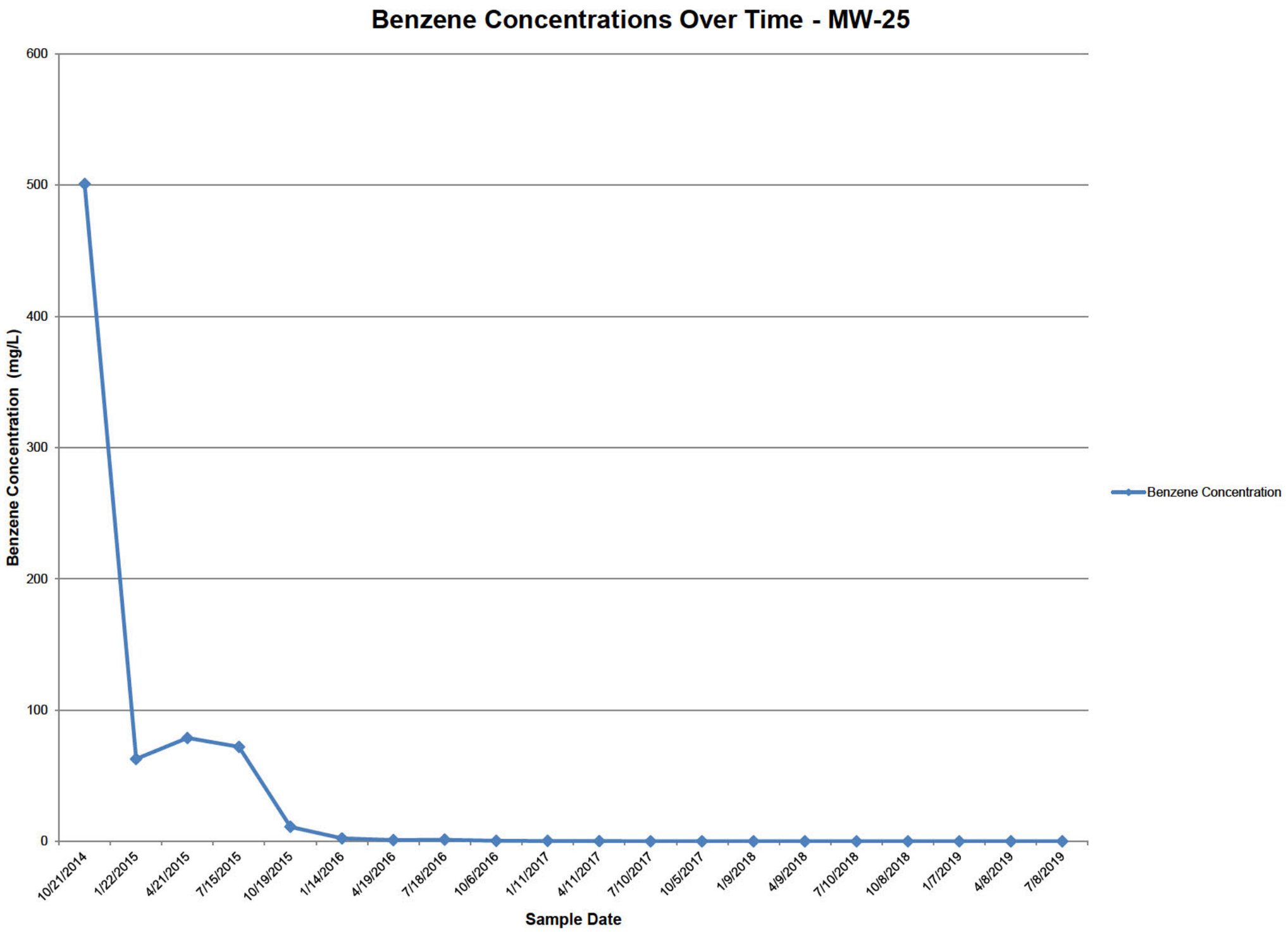
Dates specific to available data.



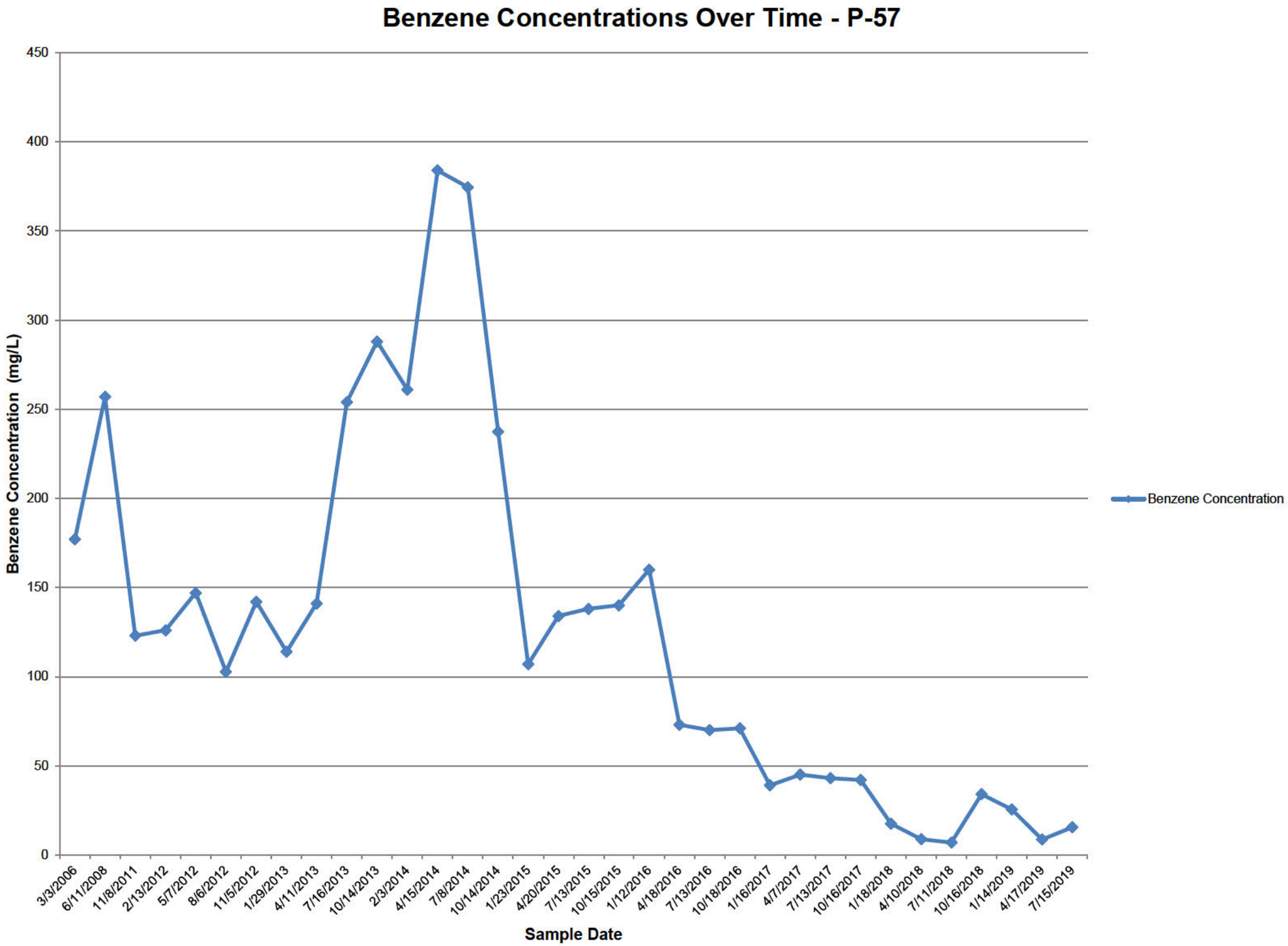
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



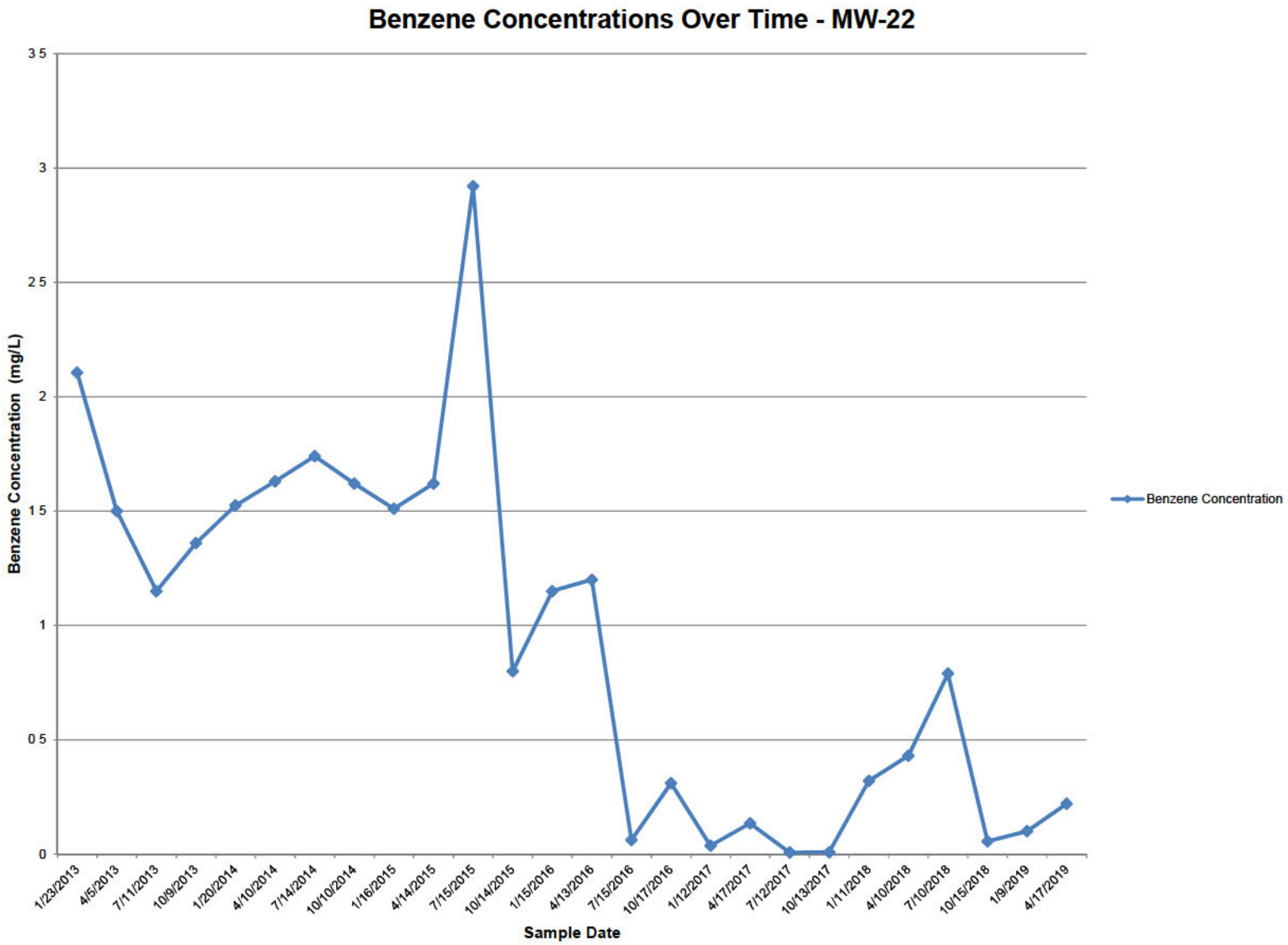
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



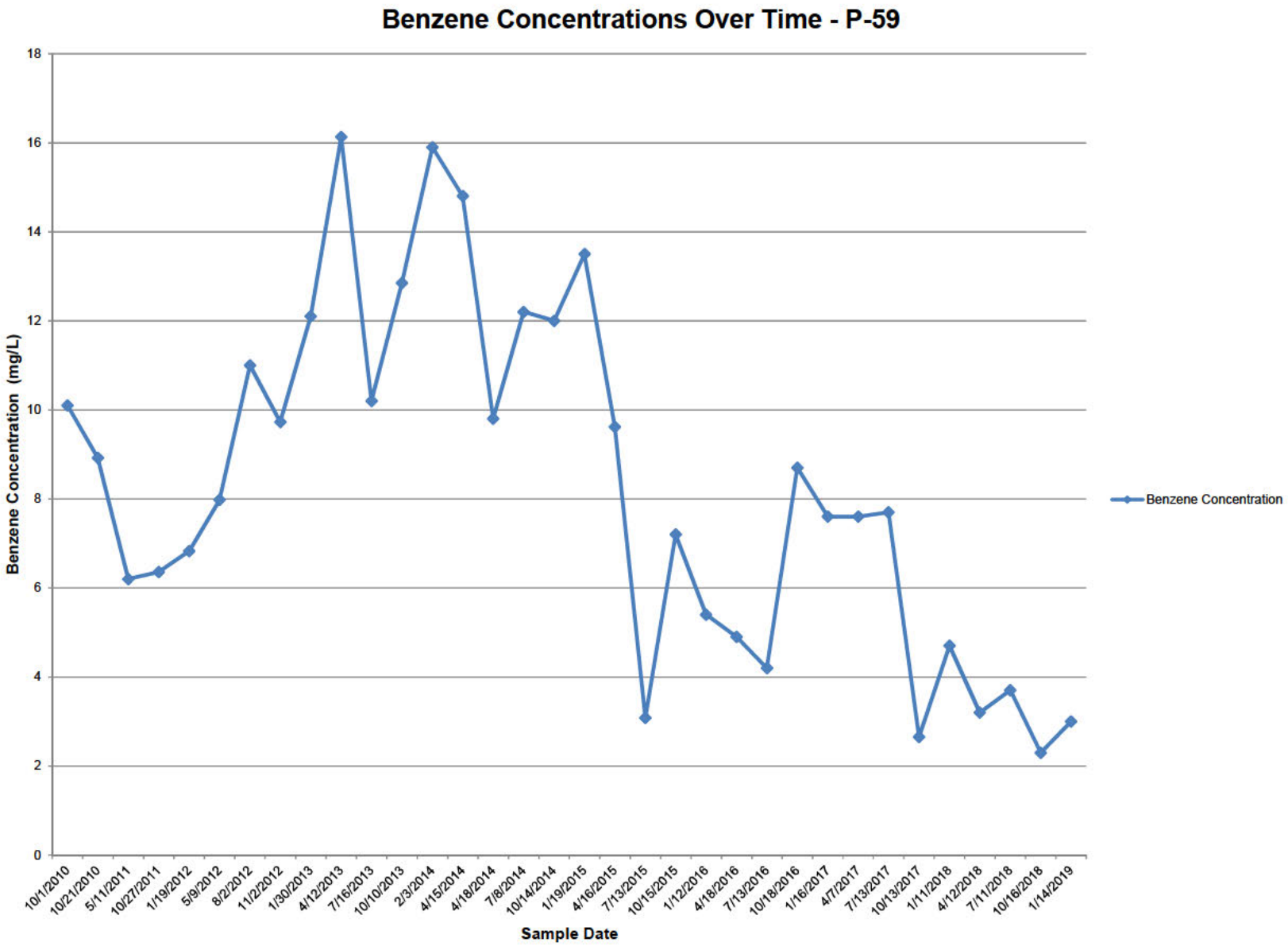
Notes:
mg/L = milligrams per liter
Timeframe specific to available data.



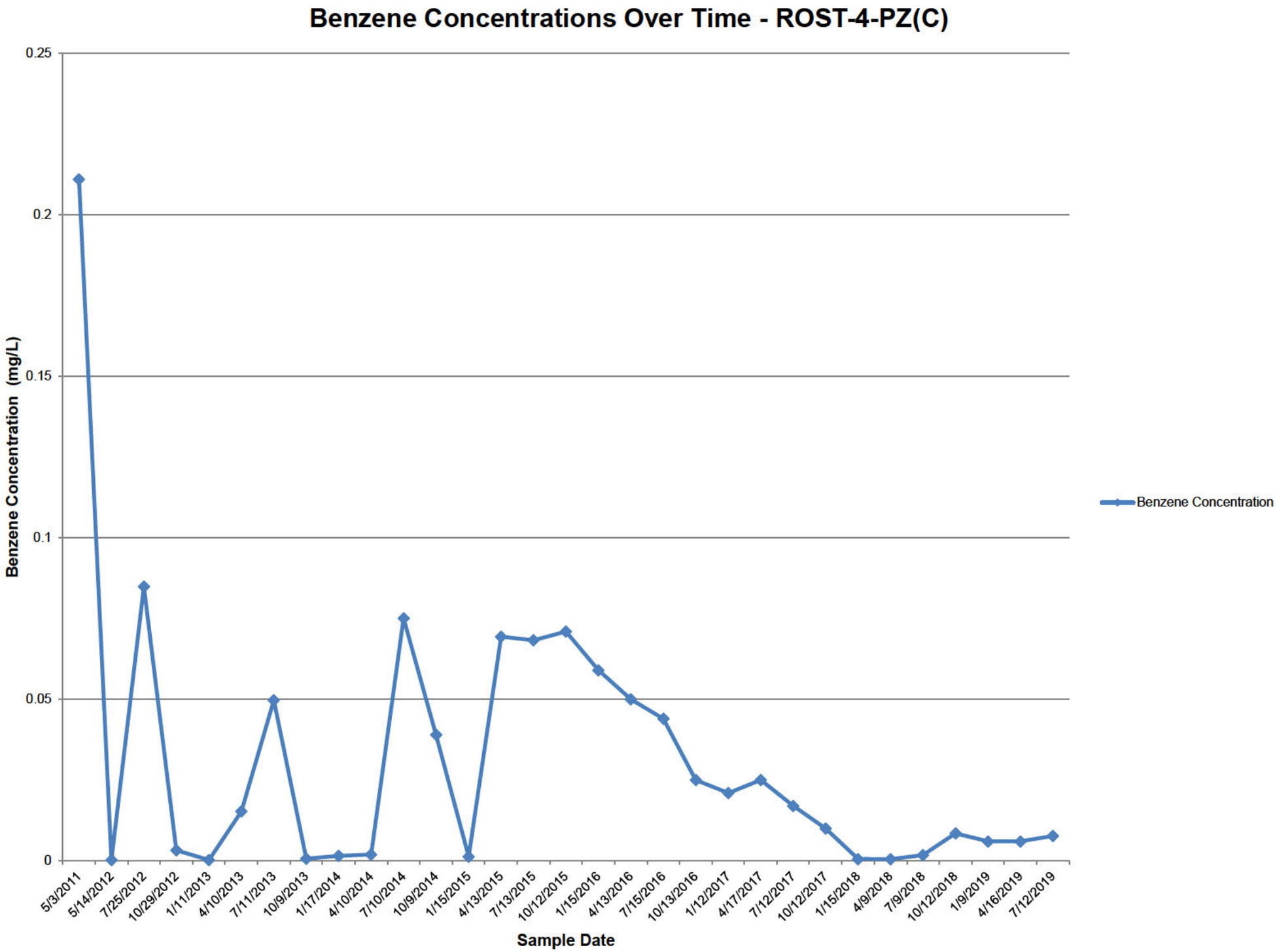
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



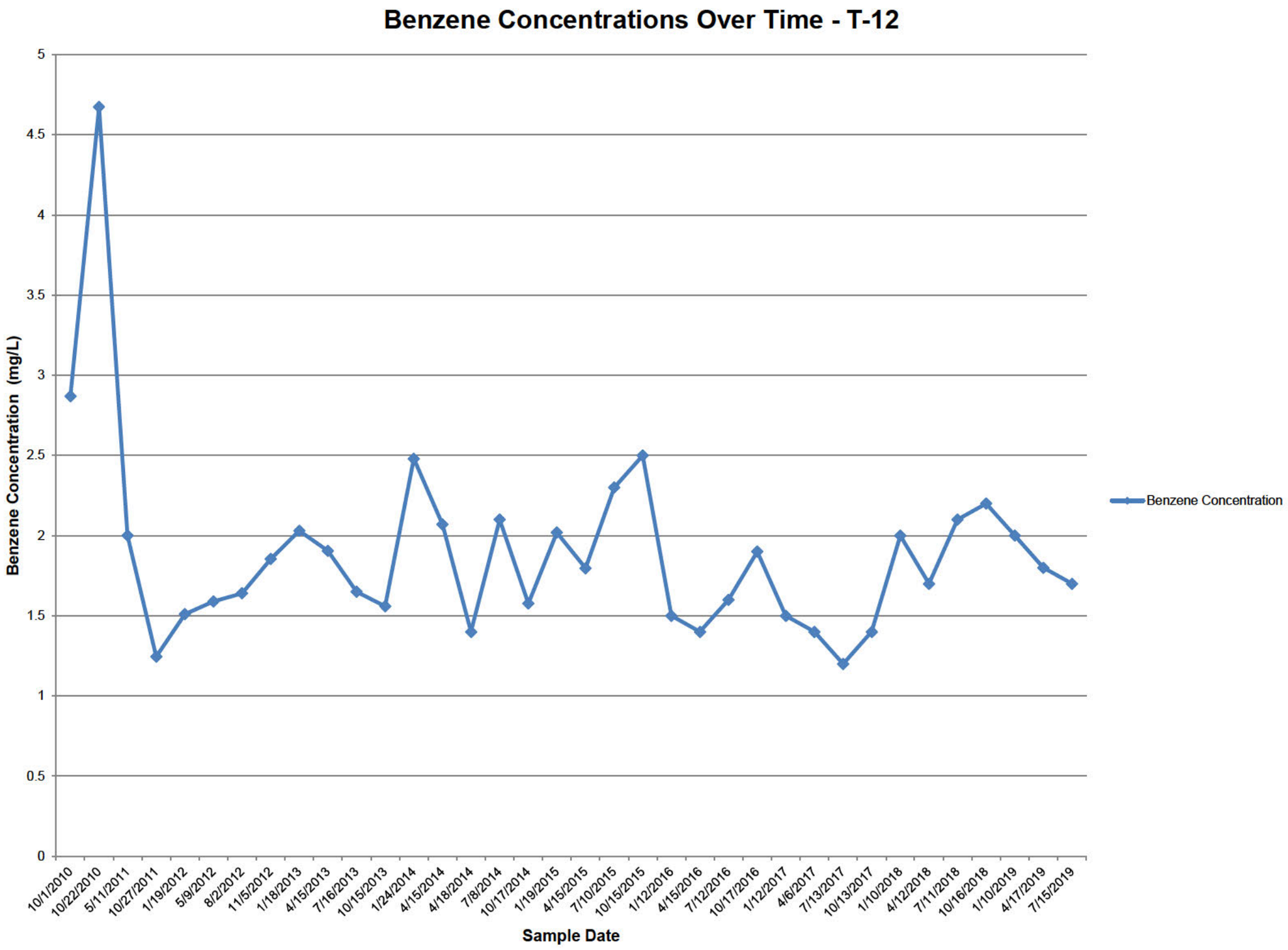
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



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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