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)

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

☐ Well Construction Information

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

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

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

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

☐ Gas Monitoring Reports

☑ Other (identify)

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
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314 429 0100 tel
314 429 0462 fax

January 13, 2020

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

Groundwater Monitoring Report – 4th 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 Dan Kirk, SOPUS Principal Program Manager, at dan.kirk@shell.com (281/544-9796), or Bob Billman at bob.billman@aecom.com (314/743-4108).

Sincerely,

AECOM, on behalf of Shell Oil Products US

Melissa Remiger
Environmental Scientist

Robert E. Mooshegian, STS
Senior Program Manager

Enclosures: 4th Quarter 2019 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form
(Original plus 1 copy)

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

AECOM

4th Quarter 2019 Report

Roxana Interim Groundwater Monitoring Program

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

Project Number: 60592794
January 2020

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1 Introduction

AECOM Technical Services, Inc. (AECOM) is submitting this report on behalf of Equilon Enterprises LLC d/b/a Shell Oil Products US (SOPUS) for the 4th Quarter 2019 (4Q19) groundwater monitoring well gauging and sampling conducted in the Village of Roxana, Illinois (**Figure 1**). The study area within the Village of Roxana (Village) is generally bounded by the alley north of First Street, Illinois Route 111, the West Fenceline of the WRB Refining, LP (WRB) Wood River Refinery (WRR), and the Roxana Public Works Yard. Some groundwater monitoring wells within the WRR were also sampled as part of this event; this was conducted in cooperation with WRB/Phillips 66 (P66). For purposes of presentation in this report only, the combined area is collectively referred to as the "Investigation Area."

In an August 5, 2010 letter from the Illinois Environmental Protection Agency (IEPA) to SOPUS (IEPA, 2010a), IEPA requested various site characterization and monitoring activities, along with initiation of the Interim Groundwater Monitoring Program. This program began in 4th Quarter 2010 (4Q10), and the first report was submitted on January 14, 2011. On March 3, 2011, a conference call was held among representatives of SOPUS, IEPA, and URS Corporation (URS) to discuss the groundwater monitoring program and IEPA's general comments on the 4Q10 report. Subsequent modifications were incorporated during the 1st Quarter 2011 (1Q11) and 2nd Quarter 2011 (2Q11) Interim Groundwater Monitoring Program. Additional items and comments regarding the Interim Groundwater Monitoring Program were presented by IEPA in June 16, 2011 (IEPA, 2011a) and August 31, 2011 (IEPA, 2011b) letters. These items and comments were addressed in the 3rd Quarter 2011 (3Q11) and 4th Quarter 2011 (4Q11) reports.

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

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

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

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

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

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

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

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

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

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

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

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

- The 1Q15 groundwater samples obtained from: (1) the current monitoring well network; (2) the four new wells required by the modified Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Post-Closure Permit (Permit) at the WRR, issued September 23, 2010 (modified December 20, 2019) (IEPA, 2010b); and (3) the new well required by the October 9, 2014, letter must be used in a demonstration to verify the extent of groundwater contamination has been delineated; or
- If SOPUS cannot define the extent of contamination, a proposal for additional investigation must be submitted.

On April 16, 2015, AECOM, on behalf of SOPUS, submitted a demonstration to verify the extent of groundwater contamination has been delineated (AECOM, 2015). The demonstration is based on monitoring data from wells in the

Roxana Interim Groundwater Monitoring Program. Additional information was submitted to IEPA in a letter dated January 29, 2016 (AECOM, 2016a). In a letter dated February 23, 2016 (IEPA, 2016c), IEPA agreed with this determination and required a Groundwater Management Zone (GMZ) proposal be submitted within 90 days. The GMZ proposal was submitted by AECOM, on behalf of SOPUS, on May 19, 2016 (AECOM, 2016b). IEPA provided comments via email in October 2017; AECOM responded to IEPA comments on January 2, 2018 (AECOM, 2018a). Meetings with SOPUS, AECOM and IEPA representatives were held on April 5, 2018 and July 19, 2018 in order to provide additional information regarding the proposed GMZ. On September 26, 2018, AECOM, on behalf of SOPUS, submitted *Groundwater Management Zone – Additional Information* to present information requested via email dated September 5, 2018 (AECOM, 2018b).

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

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

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

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

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

Groundwater samples were collected and analyzed during 4Q19 to meet the requirements of the Interim Groundwater Monitoring Program, as specified in the above guidances. **Figure 2** shows the groundwater monitoring wells that are part of the interim monitoring well network.

2 Groundwater Sampling and Analytical Procedures

The groundwater monitoring well gauging, sample collection, and analytical procedures are discussed in this section. Gauging and sampling procedures are based on the Interim Groundwater Monitoring Program, as outlined in the IEPA's letter dated August 5, 2010 (IEPA, 2010a), and as modified based on other correspondence described in **Section 1**.

2.1 Health & Safety

Health & Safety

The quarterly sampling activities were performed in general accordance with the project-specific Health and Safety Plan (HASP), dated November 1, 2018 (AECOM, 2018c).

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

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

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

2.2 Additional Activities or Modifications

No additional work activities or modifications were conducted during 4Q19.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between October 1and 3, 2019. The 4Q19 gauging activities were conducted in conjunction with the 4Q19 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 October 3 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-22 through MW-28, P-54, P-56, P-57, P-59, P-66, P-74, P-93A, P-93C, P-114R, ROST-3-MW, ROST-4-PZ(C), ROST-4-PZ(E), ROST-4-PZ(G), and T-12 were purged and sampled using a Proactive™ Stainless Steel Monsoon Pump (pump), low-flow controller, and designated[1] polyethylene tubing. The pump and designated polyethylene tubing were slowly lowered into the groundwater monitoring well to be sampled and set with the pump intake near the midpoint of the groundwater monitoring well screen.

Groundwater monitoring wells P-93B and P-93D were purged and sampled using dedicated stainless steel QED Environmental Systems (QED) Well Wizard® groundwater sampling pumps (Well Wizard®) and dedicated bonded polyethylene tubing. The Well Wizards® typically have a length of 42 inches, an outside diameter of 1.5 inches, and a Teflon® bladder capacity of approximately 495 milliliters (mL). The Well Wizard® and associated bonded polyethylene tubing are dedicated to each well and remain in place between sampling events. The dedicated pump intake is positioned near the midpoint of the well screen and the pump is operated using a QED MP10 MicroPurge® Controller and compressor.

For both sampling methods, the tubing from the sampling pump was connected to a flow-through cell, which discharged into a 5-gallon plastic container. Pumping was performed at a low flow rate (≤ 500 mL/minute) to minimize drawdown of the water level within the groundwater monitoring well. During groundwater purging, water quality parameters (pH, temperature, specific conductivity, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP)) were measured and recorded on the low flow groundwater sampling data sheets after every flow-through cell volume. Purging continued until a minimum of three flow-through cell volumes of water were removed and the groundwater quality parameters stabilized, or a maximum purge time of two hours was reached. The final water quality parameters were recorded in the 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 wells located inside the WRR and designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-58, and P-68, contained LNAPL when gauged and, therefore, were not sampled.

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

2.4 Decontamination and Investigation-Derived Waste

Decontamination

Field personnel and equipment underwent decontamination procedures to ensure the health and safety of those present, to maintain sample integrity, and to minimize cross contamination. Reusable sampling equipment (e.g., groundwater pump) was decontaminated after each sample location by spraying and/or wiping down with isopropyl alcohol, then washing with LiquiNox® and distilled water, and finishing with a distilled water rinse. The wash and rinse water were replaced periodically throughout the day, at least at mid-day. Interface probes were decontaminated by wiping down with LiquiNox® followed by a distilled water rinse. Personnel and small equipment decontamination were performed at the sample locations.

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

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

Public Works Yard (satellite accumulation area), and removed by Heritage Environmental Services, LLC (Heritage). This material is managed as hazardous waste based on prior characterization and was disposed at the Heritage facility in Indianapolis, Indiana.

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

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

2.5 Groundwater Sample Handling and Laboratory Testing

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

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

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

2.6 Data Quality Review and Data Management

Laboratory data were provided in electronic form and included data qualifiers on the basis of the laboratory's quality control or to indicate sample analysis information. The data were independently reviewed and qualified by AECOM. One hundred percent of the data were subjected to a data quality review. 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 4Q19 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 4Q19 event was conducted between October 1 and 3, 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**. Groundwater levels in most wells in the vicinity of the West Fenceline have risen approximately 1 to 2.25 feet since the 3Q19 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have risen approximately 1 to 2 feet since the 3Q19 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 4Q19 event. The potentiometric surface observed during the 4Q19 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates groundwater flow toward the WRR groundwater production wells.

During the 4Q19 quarterly groundwater monitoring well gauging event, LNAPL was detected in three Interim Groundwater Monitoring Program groundwater monitoring wells (P-55R, P-58, and P-68). LNAPL was not detected at monitoring well P-60 during the quarterly groundwater monitoring well gauging event but was detected during the quarterly groundwater sampling event. All of these monitoring wells are located in the WRR (**Table 1**). In these wells, LNAPL thicknesses ranged from 0.01 to 0.06 feet. **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 4Q19 gauging event. LNAPL was not observed in groundwater monitoring wells located in the Village.

LNAPL thickness greater than 0.10 feet was not observed during 4Q19; therefore LNAPL recovery efforts were not performed during 4Q19.

3.2 Data Quality Review Results

A total of 12 sample delivery groups (SDGs) were prepared and sent to TestAmerica for the 4Q19 event. Fifty-two different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 52 samples included 41 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 4Q19 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 12 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

Based on laboratory control sample (LCS), MS/MSD, surrogate, holding time, and field duplicate criteria, the groundwater analytical results reported were accepted for their intended use. Analytical results qualified by AECOM are specified in the data reviews presented in **Appendix 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 3Q19 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 13 groundwater monitoring wells in the Interim Groundwater Monitoring Program (six 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
- Naphthalene
- 1,3,5-Trimethylbenzene
- 2-Methylnaphthalene
- Ethylbenzene
- 1,2,4-Trimethylbenzene
- bis(2-Ethylhexyl)phthalate
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 4Q19. **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 4Q19 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 4Q19, groundwater level data indicate groundwater flow from the Investigation Area is moving toward groundwater production wells at the WRR. Groundwater levels in most wells in the vicinity of the West Fenceline have risen approximately 1 to 2.25 feet since the 3Q19 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have risen approximately 1 to 2 feet since the previous quarter.
- The analytical results from 4Q19 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

[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.

the Work Product to third parties at its sole risk and discretion. This report is based on data, site conditions, and other information that is generally applicable as of the date of this report, and the conclusions and recommendations herein are therefore applicable only to that time frame and to the report in its entirety.

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

4 References

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

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

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

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

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

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

AECOM, 2018 (AECOM, 2018c); *Shell HAZWOPER Health and Safety Plan: Rand Avenue, Roxana / Route 111, and WRR Investigation and Remediation*. Prepared for Shell Oil Products US (SOPUS), dated November 1, 2018.

Illinois Environmental Protection Agency, 2007 (IEPA, 2007); 35 Illinois Administrative Code 742, Tiered Approach to Corrective Action Objectives. Appendix B. *Table E – Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route*. Effective February 23, 2007; accessed on December 2, 2019.

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

Illinois Environmental Protection Agency, 2010 (IEPA, 2010b); *Hazardous Waste Management RCRA Post-Closure Permit.* Issued to Shell Oil Products US (SOPUS) at the WRB Refining LP Wood River Refinery (WRB WRR), issued September 23, 2010; effective October 28, 2010; modified April 2, 2013; modified June 13, 2014; modified November 25, 2014; modified July 29, 2015; modified December 20, 2019.

Illinois Environmental Protection Agency, 2011 (IEPA, 2011a); *Corrective Action Letter for the West Fenceline*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated June 16, 2011.

Illinois Environmental Protection Agency, 2011 (IEPA, 2011b); *RCRA Response to Groundwater for Second Quarter 2011*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated August 31, 2011.

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

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

Illinois Environmental Protection Agency, 2012 (IEPA, 2012c); 35 Illinois Administrative Code 620, Subpart D, Section 410. *Groundwater Quality Standards for Class 1: Potable Resource Groundwater (Part 620)*. Effective October 5, 2012; accessed on December 2, 2019.

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

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

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

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

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

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

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

Illinois Environmental Protection Agency, 2016 (IEPA, 2016b); *IEPA Approval Conditions and Modifications for the Response to IEPA Letter Dated April 8, 2013, for Groundwater Conditions Near East 3rd and Chaffer Streets (which was dated July 29, 2013*. Issued to Shell Oil Products (SOPUS) and WRB Refining LP (WRB Wood River Refinery (WRR), dated July 27, 2016.

Illinois Environmental Protection Agency, 2016 (IEPA, 2016c); *Response to Two Subject Submittals Submitted on Behalf of Shell Oil Products US (SOPUS) by URS Corporation (URS), in Regards to the WRB Refining, LLC Wood River Refinery (WRR) in Roxana, IL*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated February 23, 2016.

Illinois Environmental Protection Agency, 2017 (IEPA, 2017); *IEPA Approval to Reduce Gauging – Roxana Groundwater Monitoring Program*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated August 2, 2017.

Illinois Environmental Protection Agency Toxicity Assessment Unit; *Chemicals Not in TACO, Tier 1 Tables*, 2018 (IEPA, 2018). http://www.epa.state.il.us/land/taco/chemicals-not-in-taco-tier-1-tables.html. Accessed on December 2, 2019.

Illinois Environmental Protection Agency, 2019 (IEPA, 2019); *Groundwater Ordinances Reviewed for Use As Environmental Institutional Controls*. http://epadata.epa.state.il.us/land/gwordinance/municipality.asp?Municipality=Roxana. Emailed to Shell Oil Products US (SOPUS), dated November 7, 2019.

URS Corporation, 2013 (URS, 2013a); *Roxana Perched Groundwater Monitoring Locations*; Prepared for Shell Oil Products US (SOPUS); dated August 16, 2013.

URS Corporation, 2013 (URS, 2013b); *Response to IEPA Letter April 8, 2013 – Groundwater Conditions near East 3rd and Chaffer Streets, Roxana, Illinois*; Prepared for Shell Oil Products US (SOPUS); dated July 29, 2013.

URS Corporation, 2013 (URS, 2013c); *Proposed Plan for Groundwater Corrective Action, Roxana, Illinois*; Prepared for Shell Oil Products US (SOPUS); dated November 14, 2013.

URS Corporation, 2014 (URS, 2014a); *Perched Groundwater Monitoring Locations*; Prepared for Shell Oil Products US (SOPUS); dated January 14, 2014.

URS Corporation, 2014 (URS, 2014b); *Perched Groundwater Monitoring Request for Abandonment*; Prepared for Shell Oil Products US (SOPUS); dated January 14, 2014.

URS Corporation, 2014 (URS, 2014c); *Request to Reduce Gauging – Roxana Groundwater Monitoring Program, Roxana IL*; Prepared for Shell Oil Products US (SOPUS); dated December 5, 2014.

U.S. Environmental Protection Agency, January 2017 (USEPA, 2017); *National Functional Guidelines for Superfund Organic Methods Data Review.*

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											
1Q17	442.65	1/16/2017	NE	38.35	NA	NA	NA	404.30	393.85 - 383.85 (48.80 - 58.80)	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		1/2/2018	NE	39.42	NA	NA	NA	403.23		2.6	*
2Q18		4/2/2018	NE	40.76	NA	NA	NA	401.89		0.0	*
3Q18		7/2/2018	NE	41.36	NA	NA	NA	401.29		0.0	*
4Q18		10/1/2018	NE	41.25	NA	NA	NA	401.40		0.0	*
1Q19		1/2/2019	NE	41.04	NA	NA	NA	401.61		0.0	*
2Q19		4/1/2019	NE	41.00	NA	NA	NA	401.65		0.0	*
3Q19	442.83	7/1/2019	NE	36.65	NA	NA	NA	406.18	394.03 - 384.03 (48.80 - 58.80)	0.0	*
4Q19		10/1/2019	NE	35.66	NA	NA	NA	407.17		0.1	*
MW-02											
1Q17	443.77	1/16/2017	NE	39.58	NA	NA	NA	404.19	393.90 - 383.90 (49.87 - 59.87)	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		1/2/2018	NE	41.27	NA	NA	NA	402.50		106	*
2Q18		4/3/2018	NE	41.84	NA	NA	NA	401.93		62.2	*
3Q18		7/2/2018	NE	42.78	NA	NA	NA	400.99		70.0	*
4Q18		10/1/2018	NE	42.68	NA	NA	NA	401.09		1460	*
1Q19		1/2/2019	NE	42.44	NA	NA	NA	401.33		118	*
2Q19		4/1/2019	NE	42.49	NA	NA	NA	401.28		250	*
3Q19	443.93	7/1/2019	NE	38.26	NA	NA	NA	405.67	394.06 - 384.06 (49.87 - 59.87)	200	*
4Q19		10/1/2019	NE	37.11	NA	NA	NA	406.82		34.6	*
MW-03											
1Q17	430.08	1/16/2017	NE	25.65	NA	NA	NA	404.43	395.41 - 385.41 (34.67 - 44.67)	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		1/2/2018	NE	27.17	NA	NA	NA	402.91		0.4	*
2Q18		4/2/2018	NE	28.03	NA	NA	NA	402.05		0.0	*
3Q18		7/2/2018	NE	28.32	NA	NA	NA	401.76		0.2	*
4Q18		10/1/2018	NE	28.20	NA	NA	NA	401.88		0.0	*
1Q19		1/2/2019	NE	27.95	NA	NA	NA	402.13		0.0	*
2Q19		4/1/2019	NE	27.85	NA	NA	NA	402.23		0.0	*
3Q19	430.23	7/1/2019	NE	23.10	NA	NA	NA	407.13	395.56 - 385.56 (34.67 - 44.67)	0.0	*
4Q19		10/1/2019	NE	22.53	NA	NA	NA	407.70		0.0	*
MW-04											
1Q17	441.14	1/16/2017	NE	36.84	NA	NA	NA	404.30	396.08 - 386.08 (45.06 - 55.06)	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		1/2/2018	NE	38.46	NA	NA	NA	402.68		1.9	*
2Q18		4/2/2018	NE	39.26	NA	NA	NA	401.88		29.2	*
3Q18		7/2/2018	NE	39.73	NA	NA	NA	401.41		0.0	*
4Q18		10/1/2018	NE	39.64	NA	NA	NA	401.50		0.0	*
1Q19		1/2/2019	NE	39.38	NA	NA	NA	401.76		0.0	*
2Q19		4/1/2019	NE	39.27	NA	NA	NA	401.87		0.0	*
3Q19	441.31	7/1/2019	NE	34.84	NA	NA	NA	406.47	396.25 - 386.25 (45.06 - 55.06)	16.9	*
4Q19		10/1/2019	NE	33.97	NA	NA	NA	407.34		0.7	*

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MW-05											
1Q17	429.80	1/16/2017	NE	25.33	NA	NA	NA	404.47	395.83 - 385.83 (33.97 - 43.97)	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		1/2/2018	NE	27.01	NA	NA	NA	402.79		0.1	*
2Q18		4/2/2018	NE	27.73	NA	NA	NA	402.07		0.0	*
3Q18		7/2/2018	NE	27.99	NA	NA	NA	401.81		0.1	*
4Q18		10/2/2018	NE	27.93	NA	NA	NA	401.87		0.0	*
1Q19		1/2/2019	NE	27.64	NA	NA	NA	402.16		0.0	*
2Q19		4/1/2019	NE	27.50	NA	NA	NA	402.30		0.0	*
3Q19	429.98	7/1/2019	NE	22.80	NA	NA	NA	407.18	396.01 - 386.01 (33.97 - 43.97)	4.1	*
4Q19		10/1/2019	NE	22.24	NA	NA	NA	407.74		0.0	*
MW-06A											
1Q17	432.14	1/16/2017	NE	27.43	NA	NA	NA	404.71	397.31 - 387.31 (34.83 - 44.83)	0.4	*
2Q17		4/3/2017	NE	27.78	NA	NA	NA	404.36		1.4	*
3Q17		7/5/2017	NE	26.11	NA	NA	NA	406.03		0.2	*
4Q17		10/2/2017	NE	26.98	NA	NA	NA	405.16		0.0	*
1Q18		1/2/2018	NE	29.18	NA	NA	NA	402.96		0.0	*
2Q18		4/2/2018	NE	29.82	NA	NA	NA	402.32	398.29 - 388.29 (33.85 - 43.85)	0.0	*
3Q18		7/2/2018	NE	30.05	NA	NA	NA	402.09		0.0	*
4Q18		10/2/2018	NE	30.03	NA	NA	NA	402.11		0.0	*
1Q19		1/2/2019	NE	29.77	NA	NA	NA	402.37		0.0	*
2Q19		4/2/2019	NE	29.42	NA	NA	NA	402.72		0.0	*
3Q19	432.33	7/1/2019	NE	24.94	NA	NA	NA	407.39	398.48 - 388.48 (33.85 - 43.85)	0.0	*
4Q19		10/1/2019	NE	24.40	NA	NA	NA	407.93		0.0	*
MW-06B											
1Q17	432.29	1/16/2017	NE	27.49	NA	NA	NA	404.80	368.24 - 363.24 (64.05 - 69.05)	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		1/2/2018	NE	29.22	NA	NA	NA	403.07		0.0	*
2Q18		4/2/2018	NE	29.88	NA	NA	NA	402.41		0.0	*
3Q18		7/2/2018	NE	30.10	NA	NA	NA	402.19		0.0	*
4Q18		10/2/2018	NE	30.09	NA	NA	NA	402.20		0.0	*
1Q19		1/2/2019	NE	29.81	NA	NA	NA	402.48		0.0	*
2Q19		4/2/2019	NE	29.46	NA	NA	NA	402.83		0.0	*
3Q19	432.37	7/1/2019	NE	24.97	NA	NA	NA	407.40	368.32 - 363.32 (64.05 - 69.05)	0.0	*
4Q19		10/1/2019	NE	24.47	NA	NA	NA	407.90		0.1	*
MW-06C											
1Q17	432.11	1/16/2017	NE	27.26	NA	NA	NA	404.85	347.16 - 342.16 (84.95 - 89.95)	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		1/2/2018	NE	29.01	NA	NA	NA	403.10		0.0	*
2Q18		4/2/2018	NE	29.68	NA	NA	NA	402.43		0.0	*
3Q18		7/2/2018	NE	29.90	NA	NA	NA	402.21		0.0	*
4Q18		10/2/2018	NE	29.87	NA	NA	NA	402.24		0.0	*
1Q19		1/2/2019	NE	29.61	NA	NA	NA	402.50		0.0	*
2Q19		4/2/2019	NE	29.25	NA	NA	NA	402.86		0.0	*
3Q19	432.18	7/1/2019	NE	24.77	NA	NA	NA	407.41	347.23 - 342.23 (84.95 - 89.95)	0.0	*
4Q19		10/1/2019	NE	24.25	NA	NA	NA	407.93		0.1	*

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MW-06D											
1Q17	431.99	1/16/2017	NE	27.14	NA	NA	NA	404.85	327.27 - 322.27 (104.72 - 109.72)	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		1/2/2018	NE	28.87	NA	NA	NA	403.12		0.0	*
2Q18		4/2/2018	NE	29.53	NA	NA	NA	402.46		0.0	*
3Q18		7/2/2018	NE	29.74	NA	NA	NA	402.25		0.0	*
4Q18		10/2/2018	NE	29.72	NA	NA	NA	402.27		0.0	*
1Q19		1/2/2019	NE	29.45	NA	NA	NA	402.54		0.0	*
2Q19		4/2/2019	NE	29.11	NA	NA	NA	402.88		0.0	*
3Q19	432.06	7/1/2019	NE	24.60	NA	NA	NA	407.46	327.34 - 322.34 (104.72 - 109.72)	0.0	*
4Q19		10/1/2019	NE	24.09	NA	NA	NA	407.97		0.0	*
MW-07											
1Q17	443.10	1/16/2017	NE	38.90	NA	NA	NA	404.20	400.18 - 390.18 (42.92 - 52.92)	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		1/4/2018	NE	40.57	NA	NA	NA	402.53		2840	*PID data from 1/2/2018
2Q18		4/2/2018	NE	41.32	NA	NA	NA	401.78		490	*
3Q18		7/2/2018	NE	41.76	NA	NA	NA	401.34		5380	*
4Q18		10/2/2018	NE	41.72	NA	NA	NA	401.38		15000	*
1Q19		1/2/2019	NE	41.45	NA	NA	NA	401.65		2574	*
2Q19		4/1/2019	NE	41.33	NA	NA	NA	401.77		683	*
3Q19	443.31	7/1/2019	NE	36.94	NA	NA	NA	406.37	400.39 - 390.39 (42.92 - 52.92)	9714	*
4Q19		10/1/2019	NE	36.08	NA	NA	NA	407.23		3349	*
MW-08											
1Q17	434.11	1/16/2017	NE	29.79	NA	NA	NA	404.32	400.51 - 390.51 (33.60 - 43.60)	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		1/2/2018	NE	31.53	NA	NA	NA	402.58		87.6	*
2Q18		4/2/2018	NE	32.24	NA	NA	NA	401.87		169	*
3Q18		7/2/2018	NE	32.54	NA	NA	NA	401.57		231	*
4Q18		10/2/2018	NE	32.47	NA	NA	NA	401.64		1.4	*
1Q19		1/2/2019	NE	32.20	NA	NA	NA	401.91		0.0	*
2Q19		4/1/2019	NE	32.06	NA	NA	NA	402.05		0.0	*
3Q19	434.43	7/1/2019	NE	27.49	NA	NA	NA	406.94	400.83 - 390.83 (33.60 - 43.60)	6186	*
4Q19		10/1/2019	NE	26.85	NA	NA	NA	407.58		43.8	*
MW-09											
1Q17	445.20	1/16/2017	NE	40.06	NA	NA	NA	405.14	398.75 - 388.75 (46.45 - 56.45)	11.1	*
2Q17		4/3/2017	NE	40.56	NA	NA	NA	404.64		0.0	*
3Q17		7/5/2017	NE	38.89	NA	NA	NA	406.31		0.0	*
4Q17		10/2/2017	NE	39.22	NA	NA	NA	405.98		0.2	*
1Q18		1/2/2018	NE	41.08	NA	NA	NA	404.12		2.9	*
2Q18		4/3/2018	NE	42.12	NA	NA	NA	403.08	399.16 - 389.16 (46.04 - 56.04)	0.0	*
3Q18		7/2/2018	NE	42.86	NA	NA	NA	402.34		0.0	*
4Q18		10/1/2018	NE	42.91	NA	NA	NA	402.29		0.0	*
1Q19		1/3/2019	NE	42.85	NA	NA	NA	402.35		0.0	*
2Q19		4/1/2019	NE	42.90	NA	NA	NA	402.30		0.0	*
3Q19	445.28	7/1/2019	NE	39.16	NA	NA	NA	406.12	399.24 - 389.24 (46.04 - 56.04)	1.9	*
4Q19		10/1/2019	NE	37.90	NA	NA	NA	407.38		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW-10											
1Q17	445.03	1/16/2017	NE	39.88	NA	NA	NA	405.15	400.60 - 390.60 (44.43 - 54.43)	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		1/2/2018	NE	40.94	NA	NA	NA	404.09		6.9	*
2Q18		4/2/2018	NE	42.10	NA	NA	NA	402.93		0.0	*
3Q18		7/2/2018	NE	42.94	NA	NA	NA	402.09		0.0	*
4Q18		10/2/2018	NE	43.08	NA	NA	NA	401.95		0.0	*
1Q19		1/2/2019	NE	43.02	NA	NA	NA	402.01		0.0	*
2Q19		4/1/2019	NE	43.20	NA	NA	NA	401.83		5.3	*
3Q19	445.06	7/1/2019	NE	39.75	NA	NA	NA	405.31	400.63 - 390.63 (44.43 - 54.43)	0.0	*
4Q19		10/1/2019	NE	38.24	NA	NA	NA	406.82		0.0	*
MW-11											
1Q17	442.33	1/16/2017	NE	37.63	NA	NA	NA	404.70	400.67 - 390.67 (41.66 - 51.66)	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		1/2/2018	NE	38.93	NA	NA	NA	403.40		0.6	*
2Q18		4/2/2018	NE	39.93	NA	NA	NA	402.40		0.0	*
3Q18		7/2/2018	NE	40.59	NA	NA	NA	401.74		0.0	*
4Q18		10/1/2018	NE	40.58	NA	NA	NA	401.75		0.0	*
1Q19		1/3/2019	NE	40.46	NA	NA	NA	401.87		0.0	*
2Q19		4/1/2019	NE	40.47	NA	NA	NA	401.86		0.0	*
3Q19	442.38	7/1/2019	NE	36.33	NA	NA	NA	406.05	400.72 - 390.72 (41.66 - 51.66)	0.0	*
4Q19		10/1/2019	NE	35.20	NA	NA	NA	407.18		0.0	*
MW-12											
1Q17	442.60	1/16/2017	NE	38.11	NA	NA	NA	404.49	400.68 - 390.68 (41.92 - 51.92)	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		1/2/2018	NE	39.55	NA	NA	NA	403.05		0.8	*
2Q18		4/3/2018	NE	40.38	NA	NA	NA	402.22		0.0	*
3Q18		7/2/2018	NE	41.00	NA	NA	NA	401.60		0.0	*
4Q18		10/1/2018	NE	40.94	NA	NA	NA	401.66		0.0	*
1Q19		1/2/2019	NE	40.70	NA	NA	NA	401.90		0.0	*
2Q19		4/1/2019	NE	40.72	NA	NA	NA	401.88		0.0	*
3Q19	442.64	7/1/2019	NE	36.32	NA	NA	NA	406.32	400.72 - 390.72 (41.92 - 51.92)	0.0	*
4Q19		10/1/2019	NE	35.39	NA	NA	NA	407.25		0.0	*
MW-13											
1Q17	430.27	1/17/2017	NE	25.54	NA	NA	NA	404.73	404.70 - 394.70 (25.57 - 35.57)	20.6	*
2Q17		4/5/2017	NE	25.90	NA	NA	NA	404.37		98.7	
3Q17		7/6/2017	NE	23.67	NA	NA	NA	406.60		162	*
4Q17		10/2/2017	NE	24.95	NA	NA	NA	405.32		69.1	*
1Q18		1/3/2018	NE	26.97	NA	NA	NA	403.30		65.2	
2Q18		4/4/2018	NE	27.92	NA	NA	NA	402.35	405.47 - 395.47 (24.80 - 34.80)	0.0	
3Q18		7/3/2018	NE	27.67	NA	NA	NA	402.60		0.0	
4Q18		10/2/2018	NE	27.56	NA	NA	NA	402.71		4398	
1Q19		1/3/2019	NE	27.27	NA	NA	NA	403.00		231	
2Q19		4/3/2019	NE	27.03	NA	NA	NA	403.24		3.0	
3Q19	430.30	7/1/2019	NE	21.84	NA	NA	NA	408.46	405.50 - 395.50 (24.80 - 34.80)	81.1	*
4Q19		10/2/2019	NE	21.90	NA	NA	NA	408.40		0.4	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW-14											
1Q17	434.44	1/17/2017	NE	29.61	NA	NA	NA	404.83	401.02 - 391.02 (33.42 - 43.42)	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		1/4/2018	NE	31.23	NA	NA	NA	403.21		45.2	*
2Q18		4/4/2018	NE	32.17	NA	NA	NA	402.27		40.7	*
3Q18		7/2/2018	NE	32.19	NA	NA	NA	402.25		82.8	*
4Q18		10/3/2018	NE	32.07	NA	NA	NA	402.37		12.0	*
1Q19		1/4/2019	NE	31.78	NA	NA	NA	402.66		73.4	*
2Q19		4/2/2019	NE	31.52	NA	NA	NA	402.92		400	*
3Q19	434.61	7/2/2019	NE	27.22	NA	NA	NA	407.39	401.19 - 391.19 (33.42 - 43.42)	596	*
4Q19		10/2/2019	NE	26.64	NA	NA	NA	407.97		49.8	*
MW-16											
1Q17	443.39	1/16/2017	NE	39.15	NA	NA	NA	404.24	406.33 - 396.33 (37.06 - 47.06)	0.1	
2Q17		4/3/2017	NE	39.51	NA	NA	NA	403.88		0.0	
3Q17		7/5/2017	NE	38.18	NA	NA	NA	405.21		4.6	
4Q17		10/2/2017	NE	38.15	NA	NA	NA	405.24		0.0	
1Q18		1/2/2018	NE	40.68	NA	NA	NA	402.71		0.8	
2Q18		4/3/2018	NE	41.42	NA	NA	NA	401.97	405.89 - 395.89 (37.50 - 47.50)	0.0	
3Q18		7/2/2018	NE	42.33	NA	NA	NA	401.06		0.0	
4Q18		10/1/2018	NE	42.27	NA	NA	NA	401.12		0.0	
1Q19		1/11/2019	NE	42.10	NA	NA	NA	401.29		0.0	
2Q19		4/1/2019	NE	42.11	NA	NA	NA	401.28		0.0	
3Q19	443.60	7/2/2019	NE	37.87	NA	NA	NA	405.73	406.10 - 396.10 (37.50 - 47.50)	0.0	
4Q19		10/1/2019	NE	36.74	NA	NA	NA	406.86		0.0	*
MW-17											
1Q17	441.57	1/16/2017	NE	37.42	NA	NA	NA	404.15	407.28 - 392.28 (34.29 - 49.29)	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		1/3/2018	NE	38.79	NA	NA	NA	402.78		362	PID data from 1/2/2018
2Q18		4/2/2018	NE	39.67	NA	NA	NA	401.90		0.0	
3Q18		7/2/2018	NE	40.82	NA	NA	NA	400.75		0.0	
4Q18		10/1/2018	NE	40.78	NA	NA	NA	400.79		0.0	
1Q19		1/3/2019	NE	40.54	NA	NA	NA	401.03		0.0	
2Q19		4/1/2019	NE	40.63	NA	NA	NA	400.94		0.0	
3Q19	441.78	7/1/2019	NE	36.88	NA	NA	NA	404.90	407.49 - 392.49 (34.29 - 49.29)	0.0	
4Q19		10/1/2019	NE	35.40	NA	NA	NA	406.38		0.0	
MW-18											
1Q17	442.04	1/16/2017	NE	38.08	NA	NA	NA	403.96	407.12 - 392.12 (34.92 - 49.92)	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		1/2/2018	NE	39.73	NA	NA	NA	402.31		3.2	
2Q18		4/2/2018	NE	40.34	NA	NA	NA	401.70		0.0	
3Q18		7/2/2018	NE	41.47	NA	NA	NA	400.57		0.0	
4Q18		10/1/2018	NE	41.43	NA	NA	NA	400.61		0.0	
1Q19		1/2/2019	NE	41.13	NA	NA	NA	400.91		0.0	
2Q19		4/1/2019	NE	41.29	NA	NA	NA	400.75		0.0	
3Q19	442.24	7/1/2019	NE	37.30	NA	NA	NA	404.94	407.32 - 392.32 (34.92 - 49.92)	0.0	
4Q19		10/2/2019	NE	35.86	NA	NA	NA	406.38		0.0	

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW-19											
1Q17	442.77	1/16/2017	NE	38.72	NA	NA	NA	404.05	406.43 - 391.43 (36.34 - 51.34)	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		1/4/2018	NE	40.32	NA	NA	NA	402.45		43.8	PID data from 1/2/2018
2Q18		4/3/2018	NE	40.90	NA	NA	NA	401.87		0.0	
3Q18		7/2/2018	NE	42.08	NA	NA	NA	400.69		0.0	
4Q18		10/1/2018	NE	42.04	NA	NA	NA	400.73		0.1	
1Q19		1/2/2019	NE	41.76	NA	NA	NA	401.01		0.0	
2Q19		4/1/2019	NE	41.92	NA	NA	NA	400.85		0.0	
3Q19	442.98	7/1/2019	NE	37.88	NA	NA	NA	405.10	406.64 - 391.64 (36.34 - 51.34)	0.0	
4Q19		10/2/2019	NE	36.49	NA	NA	NA	406.49		22.5	
MW-20											
1Q17	443.67	1/16/2017	NE	39.54	NA	NA	NA	404.13	407.79 - 392.79 (35.88 - 50.88)	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		1/3/2018	NE	41.03	NA	NA	NA	402.64		27.0	PID data from 1/2/2018
2Q18		4/3/2018	NE	41.76	NA	NA	NA	401.91		0.0	
3Q18		7/2/2018	NE	42.88	NA	NA	NA	400.79		0.0	
4Q18		10/2/2018	NE	42.77	NA	NA	NA	400.90		0.0	
1Q19		1/2/2019	NE	42.55	NA	NA	NA	401.12		0.0	
2Q19		4/1/2019	NE	42.62	NA	NA	NA	401.05		0.0	
3Q19	443.86	7/1/2019	NE	38.56	NA	NA	NA	405.30	407.98 - 392.98 (35.88 - 50.88)	0.0	
4Q19		10/2/2019	NE	37.22	NA	NA	NA	406.64		0.0	
MW-21											
1Q17	443.81	1/16/2017	NE	39.68	NA	NA	NA	404.13	408.80 - 393.80 (35.01 - 50.01)	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		1/2/2018	NE	41.44	NA	NA	NA	402.37		2.0	
2Q18		4/3/2018	NE	41.98	NA	NA	NA	401.83		0.1	
3Q18		7/2/2018	NE	42.74	NA	NA	NA	401.07		0.0	
4Q18		10/2/2018	NE	42.70	NA	NA	NA	401.11		8.7	
1Q19		1/2/2019	NE	42.42	NA	NA	NA	401.39		0.0	
2Q19		4/1/2019	NE	42.39	NA	NA	NA	401.42		0.0	
3Q19	444.01	7/1/2019	NE	38.11	NA	NA	NA	405.90	409.00 - 394.00 (35.01 - 50.01)	0.6	
4Q19		10/1/2019	NE	37.05	NA	NA	NA	406.96		0.0	
MW-22											
1Q17	442.16	1/16/2017	NE	37.80	NA	NA	NA	404.36	404.28 - 394.28 (37.88 - 47.88)	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		16.5	*
4Q17		10/2/2017	NE	36.74	NA	NA	NA	405.42		8.1	*
1Q18		1/3/2018	NE	39.14	NA	NA	NA	403.02		10.1	PID data from 1/2/2018
2Q18		4/3/2018	NE	40.01	NA	NA	NA	402.15	403.73 - 393.73 (38.43 - 48.43)	0.0	
3Q18		7/2/2018	NE	41.00	NA	NA	NA	401.16		0.0	
4Q18		10/2/2018	NE	40.96	NA	NA	NA	401.20		0.0	
1Q19		1/9/2019	NE	40.91	NA	NA	NA	401.25		0.0	
2Q19		4/2/2019	NE	40.79	NA	NA	NA	401.37		0.0	
3Q19	442.38	7/1/2019	NM	NM	NA	NA	NA	NA	403.95 - 393.95 (38.43 - 48.43)	NM	Unable to access
4Q19		10/2/2019	NE	35.50	NA	NA	NA	406.88		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW-23											
1Q17	431.41	1/16/2017	NE	26.83	NA	NA	NA	404.58	402.39 - 392.39 (29.02 - 39.02)	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		1/2/2018	NE	28.34	NA	NA	NA	403.07		0.6	*
2Q18		4/2/2018	NE	29.20	NA	NA	NA	402.21		36.4	
3Q18		7/2/2018	NE	29.19	NA	NA	NA	402.22		0.0	
4Q18		10/1/2018	NE	29.08	NA	NA	NA	402.33		0.0	
1Q19		1/3/2019	NE	28.81	NA	NA	NA	402.60		0.0	*
2Q19		4/2/2019	NE	28.49	NA	NA	NA	402.92		0.0	*
3Q19	431.57	7/1/2019	NE	23.34	NA	NA	NA	408.23	402.55 - 392.55 (29.02 - 39.02)	1.2	*
4Q19		10/1/2019	NE	23.30	NA	NA	NA	408.27		0.1	*
MW-24											
1Q17	443.42	1/16/2017	NE	38.97	NA	NA	NA	404.45	404.53 - 394.53 (38.89 - 48.89)	11.2	
2Q17		4/3/2017	NE	39.45	NA	NA	NA	403.97		0.8	
3Q17		7/5/2017	NE	37.75	NA	NA	NA	405.67		3.6	*
4Q17		10/2/2017	NE	38.03	NA	NA	NA	405.39		0.0	*
1Q18		1/3/2018	NE	40.22	NA	NA	NA	403.20		0.5	PID data from 1/2/2018
2Q18		4/3/2018	NE	41.17	NA	NA	NA	402.25	403.81 - 393.81 (39.61 - 49.61)	0.2	
3Q18		7/2/2018	NE	41.86	NA	NA	NA	401.56		0.0	
4Q18		10/1/2018	NE	41.83	NA	NA	NA	401.59		1.8	
1Q19		1/2/2019	NE	41.63	NA	NA	NA	401.79		0.0	
2Q19		4/1/2019	NE	41.70	NA	NA	NA	401.72		0.0	
3Q19	443.65	7/1/2019	NE	37.42	NA	NA	NA	406.23	404.04 - 394.04 (39.61 - 49.61)	0.0	*
4Q19		10/1/2019	NE	36.40	NA	NA	NA	407.25		0.0	*
MW-25											
1Q17	438.35	1/16/2017	NE	34.00	NA	NA	NA	404.35	402.76 - 392.76 (35.59 - 45.59)	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		1/3/2018	NE	35.51	NA	NA	NA	402.84		69.2	*
2Q18		4/2/2018	NE	36.44	NA	NA	NA	401.91		110	
3Q18		7/2/2018	NE	36.82	NA	NA	NA	401.53		0.5	
4Q18		10/2/2018	NE	36.75	NA	NA	NA	401.60		3.9	
1Q19		1/2/2019	NE	36.47	NA	NA	NA	401.88		44.7	
2Q19		4/1/2019	NE	36.36	NA	NA	NA	401.99		150	
3Q19	438.53	7/1/2019	NE	31.85	NA	NA	NA	406.68	402.94 - 392.94 (35.59 - 45.59)	32.8	*
4Q19		10/1/2019	NE	31.08	NA	NA	NA	407.45		76.5	*
MW-26											
1Q17	441.02	1/16/2017	NE	36.74	NA	NA	NA	404.28	402.87 - 392.87 (38.15 - 48.15)	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		1/2/2018	NE	38.33	NA	NA	NA	402.69		5.0	
2Q18		4/4/2018	NE	39.35	NA	NA	NA	401.67		0.0	
3Q18		7/2/2018	NE	39.71	NA	NA	NA	401.31		0.2	
4Q18		10/1/2018	NE	39.60	NA	NA	NA	401.42		0.0	
1Q19		1/2/2019	NE	39.38	NA	NA	NA	401.64		0.0	
2Q19		4/1/2019	NE	39.30	NA	NA	NA	401.72		0.0	
3Q19	441.23	7/1/2019	NE	34.94	NA	NA	NA	406.29	403.08 - 393.08 (38.15 - 48.15)	0.0	*
4Q19		10/1/2019	NE	33.99	NA	NA	NA	407.24		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW-27											
1Q17	443.40	1/16/2017	NE	38.05	NA	NA	NA	405.35	403.61 - 393.61 (39.79 - 49.79)	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		1/2/2018	NE	38.78	NA	NA	NA	404.62		1.7	*
2Q18		4/3/2018	NE	40.19	NA	NA	NA	403.21		0.0	
3Q18		7/2/2018	NE	41.16	NA	NA	NA	402.24		0.0	
4Q18		10/1/2018	NE	41.11	NA	NA	NA	402.29		0.0	
1Q19		1/3/2019	NE	40.99	NA	NA	NA	402.41		0.0	
2Q19		4/1/2019	NE	41.26	NA	NA	NA	402.14		0.0	
3Q19	443.60	7/1/2019	NE	38.03	NA	NA	NA	405.57	403.81 - 393.81 (39.79 - 49.79)	0.0	*
4Q19		10/1/2019	NE	36.00	NA	NA	NA	407.60		0.0	*
MW-28											
1Q17	443.34	1/16/2017	NE	37.14	NA	NA	NA	406.20	409.73 - 399.73 (33.61 - 43.61)	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		1/2/2018	NE	37.96	NA	NA	NA	405.38		0.9	
2Q18		4/3/2018	NE	39.39	NA	NA	NA	403.95		0.0	
3Q18		7/2/2018	NE	40.14	NA	NA	NA	403.20		0.0	
4Q18		10/1/2018	NE	40.18	NA	NA	NA	403.16		0.0	
1Q19		1/3/2019	NE	40.20	NA	NA	NA	403.14		0.0	
2Q19		4/1/2019	NE	40.46	NA	NA	NA	402.88		0.0	
3Q19	443.55	7/1/2019	NE	37.56	NA	NA	NA	405.99	409.94 - 399.94 (33.61 - 43.61)	0.0	
4Q19		10/1/2019	NE	35.72	NA	NA	NA	407.83		0.0	
P-01											
1Q17	442.73	1/17/2017	NE	29.46	NA	NA	NA	413.27	380.78 - 375.78 (61.95 - 66.95)	0.0	*
2Q17		4/4/2017	NE	30.25	NA	NA	NA	412.48		0.0	*
3Q17		7/5/2017	NE	26.73	NA	NA	NA	416.00		0.0	*
4Q17		10/3/2017	NE	28.94	NA	NA	NA	413.79		0.0	*
1Q18		1/4/2018	NE	30.05	NA	NA	NA	412.68		0.0	*
2Q18		4/4/2018	NE	30.60	NA	NA	NA	412.13	380.51 - 375.51 (62.22 - 67.22)	0.0	*
3Q18		7/3/2018	NE	31.03	NA	NA	NA	411.70		0.0	*
4Q18		10/3/2018	NE	31.93	NA	NA	NA	410.80		0.1	*
1Q19		1/3/2019	NE	33.27	NA	NA	NA	409.46		0.0	*
2Q19		4/3/2019	NE	32.24	NA	NA	NA	410.49		0.0	*
3Q19	442.98	7/2/2019	NE	29.96	NA	NA	NA	413.02	380.76 - 375.76 (62.22 - 67.22)	0.0	*
4Q19		10/2/2019	NE	29.51	NA	NA	NA	413.47		0.0	*
P-4U											
1Q17	442.54	1/17/2017	NE	30.53	NA	NA	NA	412.01	361.39 - 359.39 (81.15 - 83.15)	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		1/4/2018	NE	31.25	NA	NA	NA	411.29		0.0	*
2Q18		4/4/2018	NE	32.40	NA	NA	NA	410.14		0.0	*
3Q18		7/3/2018	NE	32.61	NA	NA	NA	409.93		0.0	*
4Q18		10/3/2018	NE	33.25	NA	NA	NA	409.29		0.0	*
1Q19		1/4/2019	NE	34.45	NA	NA	NA	408.09		0.0	*
2Q19		4/3/2019	NE	34.06	NA	NA	NA	408.48		0.0	*
3Q19	442.74	7/2/2019	NE	31.80	NA	NA	NA	410.94	361.59 - 359.59 (81.15 - 83.15)	0.0	*
4Q19		10/2/2019	NE	31.10	NA	NA	NA	411.64		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-5L											
1Q17	443.84	1/17/2017	NE	30.59	NA	NA	NA	413.25	303.44 - 301.44 (140.40 - 142.40)	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		1/3/2018	NE	31.43	NA	NA	NA	412.41		0.0	*
2Q18		4/3/2018	NE	31.85	NA	NA	NA	411.99		0.0	*
3Q18		7/3/2018	NE	32.59	NA	NA	NA	411.25		0.0	*
4Q18		10/3/2018	NE	33.59	NA	NA	NA	410.25		0.0	*
1Q19		1/4/2019	NE	34.93	NA	NA	NA	408.91		0.0	*
2Q19		4/3/2019	NE	34.05	NA	NA	NA	409.79		0.0	*
3Q19	444.01	7/2/2019	NE	31.10	NA	NA	NA	412.91	303.61 - 301.61 (140.40 - 142.40)	0.0	*
4Q19		10/2/2019	NE	30.98	NA	NA	NA	413.03		0.0	*
P-5U											
1Q17	444.24	1/17/2017	NE	31.81	NA	NA	NA	412.43	313.61 - 311.61 (130.63 - 132.63)	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		1/3/2018	NE	32.44	NA	NA	NA	411.80		0.1	*
2Q18		4/3/2018	NE	33.14	NA	NA	NA	411.10		0.0	*
3Q18		7/3/2018	NE	33.86	NA	NA	NA	410.38		0.0	*
4Q18		10/3/2018	NE	34.77	NA	NA	NA	409.47		0.0	*
1Q19		1/4/2019	NE	36.21	NA	NA	NA	408.03		0.0	*
2Q19		4/3/2019	NE	35.29	NA	NA	NA	408.95		0.0	*
3Q19	444.42	7/2/2019	NE	33.08	NA	NA	NA	411.34	313.79 - 311.79 (130.63 - 132.63)	0.0	*
4Q19		10/2/2019	NE	32.31	NA	NA	NA	412.11		0.0	*
P-6U											
1Q17	443.45	1/17/2017	NE	31.19	NA	NA	NA	412.26	362.95 - 360.95 (80.50 - 82.50)	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		1/4/2018	NE	32.14	NA	NA	NA	411.31		0.0	*
2Q18		4/3/2018	NE	32.69	NA	NA	NA	410.76		0.0	*
3Q18		7/3/2018	NE	33.39	NA	NA	NA	410.06		0.0	*
4Q18		10/3/2018	NE	34.06	NA	NA	NA	409.39		0.0	*
1Q19		1/4/2019	NE	35.37	NA	NA	NA	408.08		0.0	*
2Q19		4/3/2019	NE	35.00	NA	NA	NA	408.45		0.0	*
3Q19	443.63	7/2/2019	NE	32.51	NA	NA	NA	411.12	363.13 - 361.13 (80.50 - 82.50)	0.0	*
4Q19		10/2/2019	NE	31.92	NA	NA	NA	411.71		0.0	*
P-7U											
1Q17	443.91	1/17/2017	NE	31.43	NA	NA	NA	412.48	382.83 - 380.83 (61.08 - 63.08)	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		1/3/2018	NE	32.38	NA	NA	NA	411.53		0.0	*
2Q18		4/3/2018	NE	33.01	NA	NA	NA	410.90		0.0	*
3Q18		7/3/2018	NE	33.65	NA	NA	NA	410.26		0.0	*
4Q18		10/3/2018	NE	34.39	NA	NA	NA	409.52		0.0	*
1Q19		1/4/2019	NE	35.76	NA	NA	NA	408.15		0.0	*
2Q19		4/3/2019	NE	35.25	NA	NA	NA	408.66		0.0	*
3Q19	444.08	7/2/2019	NE	32.68	NA	NA	NA	411.40	383.00 - 381.00 (61.08 - 63.08)	0.0	*
4Q19		10/2/2019	NE	32.15	NA	NA	NA	411.93		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-8U											
1Q17	441.85	1/17/2017	NE	31.42	NA	NA	NA	410.43	382.33 - 380.33 (59.52 - 61.52)	0.0	*
2Q17		4/3/2017	NE	31.88	NA	NA	NA	409.97		0.0	*
3Q17		7/6/2017	NE	29.86	NA	NA	NA	411.99		0.0	*
4Q17		10/3/2017	NE	30.85	NA	NA	NA	411.00		1.6	*
1Q18		1/4/2018	NE	32.20	NA	NA	NA	409.65		83.5	*
2Q18		4/3/2018	NE	33.13	NA	NA	NA	408.72	381.72 - 379.72 (60.13 - 62.13)	0.0	*
3Q18		7/3/2018	NE	33.88	NA	NA	NA	407.97		0.0	*
4Q18		10/2/2018	NE	34.39	NA	NA	NA	407.46		0.0	*
1Q19		1/3/2019	NE	35.60	NA	NA	NA	406.25		0.0	*
2Q19		4/2/2019	NE	35.24	NA	NA	NA	406.61		0.0	*
3Q19	442.07	7/2/2019	NE	33.51	NA	NA	NA	408.56	381.94 - 379.94 (60.13 - 62.13)	0.0	*
4Q19		10/2/2019	NE	32.58	NA	NA	NA	409.49		0.0	*
P-9U											
1Q17	445.04	1/17/2017	NE	35.97	NA	NA	NA	409.07	344.45 - 342.45 (100.59 - 102.59)	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		1/4/2018	NE	36.60	NA	NA	NA	408.44		40.5	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/3/2018	NE	38.51	NA	NA	NA	406.53		0.0	*
4Q18		10/2/2018	NE	39.11	NA	NA	NA	405.93		0.0	*
1Q19		1/3/2019	NE	40.12	NA	NA	NA	404.92		0.0	*
2Q19		4/2/2019	NE	40.14	NA	NA	NA	404.90		0.0	*
3Q19	445.20	7/2/2019	NE	38.31	NA	NA	NA	406.89	344.61 - 342.61 (100.59 - 102.59)	0.0	*
4Q19		10/2/2019	NE	41.75	NA	NA	NA	403.45		0.0	*
P-11L											
1Q17	442.55	1/17/2017	NE	32.26	NA	NA	NA	410.29	332.34 - 330.34 (110.21 - 112.21)	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		1/4/2018	NE	32.83	NA	NA	NA	409.72		0.0	*
2Q18		4/3/2018	NE	33.92	NA	NA	NA	408.63		0.0	*
3Q18		7/3/2018	NE	34.66	NA	NA	NA	407.89		0.0	*
4Q18		10/2/2018	NE	35.08	NA	NA	NA	407.47		0.0	*
1Q19		1/4/2019	NE	36.07	NA	NA	NA	406.48		0.0	*
2Q19		4/3/2019	NE	36.07	NA	NA	NA	406.48		0.0	*
3Q19	442.76	7/2/2019	NE	34.80	NA	NA	NA	407.96	332.55 - 330.55 (110.21 - 112.21)	0.0	*
4Q19		10/2/2019	NE	33.20	NA	NA	NA	409.56		0.0	*
P-11U											
1Q17	443.17	1/17/2017	NE	32.90	NA	NA	NA	410.27	343.25 - 341.25 (99.92 - 101.92)	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		1/4/2018	NE	33.45	NA	NA	NA	409.72		3.8	*
2Q18		4/3/2018	NE	34.50	NA	NA	NA	408.67		0.0	*
3Q18		7/3/2018	NE	35.25	NA	NA	NA	407.92		0.0	*
4Q18		10/2/2018	NE	35.68	NA	NA	NA	407.49		0.0	*
1Q19		1/4/2019	NE	36.73	NA	NA	NA	406.44		0.0	*
2Q19		4/3/2019	NE	36.67	NA	NA	NA	406.50		0.0	*
3Q19	443.38	7/2/2019	NE	34.94	NA	NA	NA	408.44	343.46 - 341.46 (99.92 - 101.92)	0.0	*
4Q19		10/2/2019	NE	33.80	NA	NA	NA	409.58		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-14											
1Q17	442.74	1/17/2017	NE	29.55	NA	NA	NA	413.19	395.41 - 385.41 (47.33 - 57.33)	0.0	*
2Q17		4/4/2017	NE	30.33	NA	NA	NA	412.41		0.0	*
3Q17		7/5/2017	NE	26.80	NA	NA	NA	415.94		0.0	*
4Q17		10/3/2017	NE	29.00	NA	NA	NA	413.74		0.0	*
1Q18		1/4/2018	NE	30.12	NA	NA	NA	412.62		0.0	*
2Q18		4/4/2018	NE	30.69	NA	NA	NA	412.05	395.27 - 385.27 (47.47 - 57.47)	0.0	*
3Q18		7/3/2018	NE	31.10	NA	NA	NA	411.64		0.0	*
4Q18		10/3/2018	NE	32.01	NA	NA	NA	410.73		0.0	*
1Q19		1/3/2019	NE	33.34	NA	NA	NA	409.40		0.0	*
2Q19		4/3/2019	NE	32.33	NA	NA	NA	410.41		0.0	*
3Q19	443.01	7/2/2019	NE	30.05	NA	NA	NA	412.96	395.54 - 385.54 (47.47 - 57.47)	0.0	*
4Q19		10/2/2019	NE	29.59	NA	NA	NA	413.42		0.0	*
P-15											
1Q17	443.69	1/17/2017	NE	31.20	NA	NA	NA	412.49	398.24 - 388.24 (45.45 - 55.45)	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		1/4/2018	NE	31.93	NA	NA	NA	411.76		0.0	*
2Q18		4/4/2018	NE	33.19	NA	NA	NA	410.50		0.0	*
3Q18		7/3/2018	NE	33.28	NA	NA	NA	410.41		0.0	*
4Q18		10/3/2018	NE	33.86	NA	NA	NA	409.83		0.0	*
1Q19		1/4/2019	NE	35.10	NA	NA	NA	408.59		0.0	*
2Q19		4/3/2019	NE	34.75	NA	NA	NA	408.94		0.0	*
3Q19	443.88	7/2/2019	NE	32.11	NA	NA	NA	411.77	398.43 - 388.43 (45.45 - 55.45)	0.0	*
4Q19		10/2/2019	NE	31.70	NA	NA	NA	412.18		0.0	*
P-16											
1Q17	442.68	1/17/2017	NE	30.08	NA	NA	NA	412.60	396.94 - 386.94 (45.74 - 55.74)	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		1/4/2018	NE	31.07	NA	NA	NA	411.61		0.0	*
2Q18		4/3/2018	NE	31.66	NA	NA	NA	411.02		0.0	*
3Q18		7/3/2018	NE	32.29	NA	NA	NA	410.39		0.0	*
4Q18		10/3/2018	NE	32.99	NA	NA	NA	409.69		0.0	*
1Q19		1/4/2019	NE	34.28	NA	NA	NA	408.40		0.0	*
2Q19		4/3/2019	NE	33.88	NA	NA	NA	408.80		0.0	*
3Q19	442.84	7/2/2019	NE	31.11	NA	NA	NA	411.73	397.10 - 387.10 (45.74 - 55.74)	0.0	*
4Q19		10/2/2019	NE	30.76	NA	NA	NA	412.08		0.0	*
P-43											
1Q17	444.44	1/17/2017	NE	33.71	NA	NA	NA	410.73	380.88 - 370.88 (63.56 - 73.56)	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		1/4/2018	NE	34.34	NA	NA	NA	410.10		0.0	*
2Q18		4/3/2018	NE	35.37	NA	NA	NA	409.07		0.0	*
3Q18		7/3/2018	NE	36.11	NA	NA	NA	408.33		0.0	*
4Q18		10/2/2018	NE	36.53	NA	NA	NA	407.91		0.0	*
1Q19		1/4/2019	NE	37.59	NA	NA	NA	406.85		0.3	*
2Q19		4/3/2019	NE	37.55	NA	NA	NA	406.89		0.0	*
3Q19	444.62	7/2/2019	NE	35.45	NA	NA	NA	409.17	381.06 - 371.06 (63.56 - 73.56)	0.0	*
4Q19		10/2/2019	NE	34.64	NA	NA	NA	409.98		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-53											
1Q17	446.41	1/16/2017	NE	39.63	NA	NA	NA	406.78	407.91 - 382.91 (38.50 - 63.50)	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		1/2/2018	NE	40.11	NA	NA	NA	406.30		0.5	
2Q18		4/3/2018	NE	41.38	NA	NA	NA	405.03		0.0	
3Q18		7/2/2018	NE	42.12	NA	NA	NA	404.29		0.0	
4Q18		10/2/2018	NE	42.54	NA	NA	NA	403.87		0.0	
1Q19		1/3/2019	NE	42.64	NA	NA	NA	403.77		0.0	
2Q19		4/1/2019	NE	42.79	NA	NA	NA	403.62		0.0	
3Q19	446.57	7/1/2019	NE	40.33	NA	NA	NA	406.24	407.91 - 382.91 (38.50 - 63.50)	0.0	
4Q19		10/1/2019	NE	38.69	NA	NA	NA	407.88		0.0	*
P-54											
1Q17	442.32	1/16/2017	NE	37.80	NA	NA	NA	404.52	404.32 - 379.32 (38.00 - 63.00)	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		1/2/2018	NE	39.02	NA	NA	NA	403.30		0.4	
2Q18		4/3/2018	NE	39.94	NA	NA	NA	402.38		0.0	
3Q18		7/2/2018	NE	40.51	NA	NA	NA	401.81		0.0	
4Q18		10/2/2018	NE	40.50	NA	NA	NA	401.82		0.0	
1Q19		1/2/2019	NE	40.29	NA	NA	NA	402.03		0.0	
2Q19		4/1/2019	NE	40.36	NA	NA	NA	401.96		0.0	
3Q19	442.52	7/1/2019	NE	35.96	NA	NA	NA	406.56	404.52 - 379.52 (38.00 - 63.00)	0.0	*
4Q19		10/1/2019	NE	35.07	NA	NA	NA	407.45		0.0	*
P-55R											
1Q17	443.79	1/16/2017	38.82	39.30	404.49	404.97	0.48	404.87	403.36 - 393.36 (40.43 - 50.43)	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		1/2/2018	40.30	40.38	403.41	403.49	0.08	403.47		260	*
2Q18		4/2/2018	39.20	41.25	402.54	404.59	2.05	404.18		238	*
3Q18		7/2/2018	41.51	42.12	401.67	402.28	0.61	402.16		152	
4Q18		10/1/2018	41.49	42.18	401.61	402.30	0.69	402.16		153	
1Q19		1/2/2019	41.84	42.27	401.52	401.95	0.43	401.86		15000	
2Q19		4/1/2019	41.21	41.52	402.27	402.58	0.31	402.52		280	
3Q19	444.01	7/1/2019	37.66	38.16	405.63	406.13	0.50	406.25	403.58 - 393.58 (40.43 - 50.43)	66.7	*
4Q19		10/1/2019	36.11	36.17	407.84	407.90	0.06	407.89		210	*
P-56											
1Q17	446.14	1/16/2017	NE	42.01	NA	NA	NA	404.13	405.32 - 380.32 (40.82 - 65.82)	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		1/3/2018	NE	43.51	NA	NA	NA	402.63		209	
2Q18		4/3/2018	NE	44.24	NA	NA	NA	401.90		0.0	
3Q18		7/2/2018	NE	45.34	NA	NA	NA	400.80		0.0	
4Q18		10/1/2018	NE	45.27	NA	NA	NA	400.87		0.0	
1Q19		1/2/2019	NE	45.11	NA	NA	NA	401.03		0.0	
2Q19		4/1/2019	NE	45.07	NA	NA	NA	401.07		0.0	
3Q19	446.32	7/1/2019	NE	41.09	NA	NA	NA	405.23	405.50 - 380.50 (40.82 - 65.82)	0.1	
4Q19		10/1/2019	NE	39.72	NA	NA	NA	406.60		109	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-57											
1Q17	446.96	1/16/2017	NE	42.89	NA	NA	NA	404.07	402.77 - 392.77 (44.19 - 54.19)	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		1/2/2018	NE	44.59	NA	NA	NA	402.37		190	
2Q18		4/3/2018	NE	45.10	NA	NA	NA	401.86		1.3	
3Q18		7/2/2018	NE	45.89	NA	NA	NA	401.07		1.7	
4Q18		10/2/2018	NE	45.86	NA	NA	NA	401.10		0.2	
1Q19		1/2/2019	NE	45.66	NA	NA	NA	401.30		0.0	
2Q19		4/1/2019	NE	45.49	NA	NA	NA	401.47		0.0	
3Q19	447.15	7/1/2019	NE	41.35	NA	NA	NA	405.80	402.96 - 392.96 (44.19 - 54.19)	6.8	*
4Q19		10/1/2019	NE	40.19	NA	NA	NA	406.96		85.8	*
P-58											
1Q17	444.94	1/16/2017	NE	40.78	NA	NA	NA	404.16	404.73 - 379.73 (40.21 - 65.21)	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	*
4Q19		10/1/2019	37.93	37.94	407.22	407.23	0.01	407.23		67.2	*
P-59											
1Q17	446.86	1/16/2017	NE	42.83	NA	NA	NA	404.03	398.95 - 373.95 (47.91 - 72.91)	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	*
4Q19		10/1/2019	NE	40.61	NA	NA	NA	406.46		180	*
P-60											
1Q17	446.69	1/16/2017	42.25	42.31	404.38	404.44	0.06	404.43	403.24 - 383.24 (43.45 - 63.45)	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	*
4Q19		10/1/2019	NE	40.42	NA	NA	NA	406.46		1.7	*
		10/15/2019	40.41	40.42	406.46	406.47	0.01	406.47		1.7	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-61											
1Q17	444.47	1/16/2017	NE	40.19	NA	NA	NA	404.28	398.80 - 373.80 (45.68 - 70.68)	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 well - Unable to access
3Q18		7/2/2018	43.77	44.20	400.27	400.70	0.43	400.61		91.3	*
4Q18		10/2/2018	43.89	43.93	400.54	400.58	0.04	400.57		237	*
1Q19		1/3/2019	43.79	43.83	400.64	400.68	0.04	400.67		375	*
2Q19		4/1/2019	43.80	43.81	400.66	400.67	0.01	400.67		417	*
3Q19	444.66	7/1/2019	40.39	40.40	404.26	404.27	0.01	404.27	398.98 - 373.98 (45.68 - 70.68)	220	*
4Q19		10/1/2019	NE	38.74	NA	NA	NA	405.92		68.4	*
P-62											
1Q17	442.43	1/16/2017	NE	37.81	NA	NA	NA	404.62	400.96 - 375.96 (41.47 - 66.47)	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		1/3/2018	39.05	39.09	403.34	403.38	0.04	403.37		345	*
2Q18		4/2/2018	40.03	41.01	401.42	402.40	0.98	402.20		151	*
3Q18		7/2/2018	41.38	42.49	399.94	401.05	1.11	400.83		0.0	
4Q18		10/3/2018	41.43	42.42	400.01	401.00	0.99	400.80		0.4	
1Q19		1/3/2019	41.47	42.57	399.86	400.96	1.10	400.74		1.2	
2Q19		4/1/2019	41.58	42.34	400.09	400.85	0.76	400.70		63.7	
3Q19	442.60	7/1/2019	38.86	38.89	403.71	403.74	0.03	403.73	401.13 - 376.13 (41.47 - 66.47)	301	*
4Q19		10/1/2019	37.05	37.08	405.52	405.55	0.03	405.54		104	*
P-63											
1Q17	445.85	1/17/2017	41.58	41.62	404.23	404.27	0.04	404.26	398.56 - 373.56 (47.29 - 72.29)	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		1/3/2018	42.27	42.29	403.56	403.58	0.02	403.58		33.8	*
2Q18		4/4/2018	44.09	44.11	401.74	401.76	0.02	401.76		36.5	*
3Q18		7/3/2018	45.41	45.43	400.42	400.44	0.02	400.44		222	*
4Q18		10/2/2018	45.59	45.62	400.23	400.26	0.03	400.25		70.1	*
1Q19		1/3/2019	45.58	45.61	400.24	400.27	0.03	400.26		68.2	*
2Q19		4/1/2019	45.62	45.65	400.20	400.23	0.03	400.22		852	*
3Q19	446.06	7/1/2019	43.86	43.91	402.15	402.20	0.05	402.19	398.77 - 373.77 (47.29 - 72.29)	81.2	*
4Q19		10/2/2019	41.89	41.92	404.14	404.17	0.03	404.16		5.0	*
P-64											
1Q17	446.89	1/17/2017	NE	42.64	NA	NA	NA	404.25	399.66 - 374.66 (47.23 - 72.23)	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		1/3/2018	43.20	43.23	403.66	403.69	0.03	403.68		278	*
2Q18		4/4/2018	45.14	45.19	401.70	401.75	0.05	401.74		184	*
3Q18		7/3/2018	46.69	46.73	400.16	400.20	0.04	400.19		269	*
4Q18		10/2/2018	46.94	46.99	399.90	399.95	0.05	399.94		178	*
1Q19		1/2/2019	47.21	47.53	399.36	399.68	0.32	399.62		2559	
2Q19		4/1/2019	46.96	47.08	399.81	399.93	0.12	399.91		1220	*
3Q19	446.78	7/1/2019	45.63	45.72	401.06	401.15	0.09	401.13	399.55 - 374.55 (47.23 - 72.23)	206	*
4Q19		10/2/2019	43.58	43.61	403.17	403.20	0.03	403.19		77.5	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-65											
1Q17	444.60	1/16/2017	NE	40.08	NA	NA	NA	404.52	397.58 - 372.58 (47.02 - 72.02)	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		1/3/2018	NE	41.10	NA	NA	NA	403.50		5.0	*
2Q18		4/4/2018	NE	43.02	NA	NA	NA	401.58		3.5	*
3Q18		7/3/2018	NE	43.58	NA	NA	NA	401.02		24.9	*
4Q18		10/2/2018	NE	43.91	NA	NA	NA	400.69		4.0	*
1Q19		1/3/2019	NE	44.19	NA	NA	NA	400.41		115	*
2Q19		4/1/2019	43.92	43.93	400.67	400.68	0.01	400.68		185	*
3Q19	444.77	7/1/2019	NE	41.97	NA	NA	NA	402.80	397.75 - 372.75 (47.02 - 72.02)	72.8	*
4Q19		10/2/2019	40.01	40.02	404.75	404.76	0.01	404.76		31.1	*
P-66											
1Q17	436.81	1/17/2017	NE	32.41	NA	NA	NA	404.40	402.09 - 377.09 (34.72 - 59.72)	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		1/4/2018	NE	34.06	NA	NA	NA	402.75		68.7	*
2Q18		4/4/2018	NE	35.12	NA	NA	NA	401.69		3.7	
3Q18		7/2/2018	NE	35.20	NA	NA	NA	401.61		0.0	
4Q18		10/3/2018	NE	35.03	NA	NA	NA	401.78		8.0	
1Q19		1/4/2019	NE	34.75	NA	NA	NA	402.06		1.2	
2Q19		4/2/2019	NE	34.48	NA	NA	NA	402.33		2.6	*
3Q19	437.00	7/2/2019	NE	30.27	NA	NA	NA	406.73	402.28 - 377.28 (34.72 - 59.72)	87.7	*
4Q19		10/2/2019	NE	29.50	NA	NA	NA	407.50		42.2	*
P-67											
1Q17	444.10	1/17/2017	NE	38.50	NA	NA	NA	405.60	402.12 - 377.12 (41.98 - 66.98)	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		1/4/2018	39.98	39.99	404.11	404.12	0.01	404.12		36.7	*
2Q18		4/4/2018	NE	41.04	NA	NA	NA	403.06		6.0	*
3Q18		7/2/2018	41.21	41.24	402.86	402.89	0.03	402.88		0.0	*
4Q18		10/3/2018	41.12	41.14	402.96	402.98	0.02	402.98		0.0	*
1Q19		1/4/2019	40.97	41.00	403.10	403.13	0.03	403.12		25.0	*
2Q19		4/2/2019	40.81	40.82	403.28	403.29	0.01	403.29		99.9	*
3Q19	444.30	7/2/2019	37.20	37.24	407.06	407.10	0.04	407.09	402.32 - 377.32 (41.98 - 66.98)	1.1	*
4Q19		10/2/2019	36.27	36.32	407.98	408.03	0.05	408.02		0.9	*
P-68											
1Q17	445.18	1/16/2017	40.70	40.71	404.47	404.48	0.01	404.48	399.92 - 374.92 (45.26 - 70.26)	101	*
2Q17		4/3/2017	41.02	41.07	404.11	404.16	0.05	404.15		77.8	*
3Q17		7/5/2017	40.10	40.12	405.06	405.08	0.02	405.08		181	*
4Q17		10/2/2017	39.54	39.56	405.62	405.64	0.02	405.64		125	*
1Q18		1/3/2018	42.05	42.07	403.11	403.13	0.02	403.13		137	*
2Q18		4/3/2018	42.89	42.94	402.24	402.29	0.05	402.28	401.42 - 376.42 (43.76 - 68.76)	92.0	*
3Q18		7/2/2018	44.25	44.32	400.86	400.93	0.07	400.92		136	
4Q18		10/2/2018	44.22	44.31	400.87	400.96	0.09	400.94		169	
1Q19		1/3/2019	44.07	44.26	400.92	401.11	0.19	401.07		187	
2Q19		4/1/2019	44.21	44.34	400.84	400.97	0.13	400.94		468	
3Q19	445.38	7/1/2019	40.75	40.88	404.50	404.63	0.13	404.60	401.62 - 376.62 (43.76 - 68.76)	259	*
4Q19		10/1/2019	39.13	39.17	406.21	406.25	0.04	406.24		189	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-69											
1Q17	443.40	1/16/2017	NE	39.31	NA	NA	NA	404.09	402.58 - 377.58 (40.82 - 65.82)	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		1/3/2018	NE	40.76	NA	NA	NA	402.64		120	*
2Q18		4/4/2018	NE	42.00	NA	NA	NA	401.40		0.0	
3Q18		7/2/2018	NE	43.00	NA	NA	NA	400.40		0.0	
4Q18		10/2/2018	NE	42.95	NA	NA	NA	400.45		0.0	
1Q19		1/3/2019	NE	42.80	NA	NA	NA	400.60		0.1	
2Q19		4/1/2019	NE	42.96	NA	NA	NA	400.44		0.0	
3Q19	443.77	7/1/2019	NE	39.38	NA	NA	NA	404.39	402.95 - 377.95 (40.82 - 65.82)	270	*
4Q19		10/1/2019	NE	37.70	NA	NA	NA	406.07		42.3	*
P-70											
1Q17	442.95	1/16/2017	38.52	38.57	404.38	404.43	0.05	404.42	398.28 - 373.28 (44.67 - 69.67)	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		1/2/2018	40.03	40.06	402.89	402.92	0.03	402.91		282	*
2Q18		4/2/2018	40.94	40.98	401.97	402.01	0.04	402.00		90.4	*
3Q18		7/2/2018	42.23	42.26	400.69	400.72	0.03	400.71		238	*
4Q18		10/2/2018	42.25	42.27	400.68	400.70	0.02	400.70		297	*
1Q19		1/3/2019	42.18	42.19	400.76	400.77	0.01	400.77		204	*
2Q19		4/1/2019	42.26	42.27	400.68	400.69	0.01	400.69		1406	*
3Q19	443.11	7/1/2019	38.92	38.93	404.18	404.19	0.01	404.19	398.44 - 373.44 (44.67 - 69.67)	371	*
4Q19		10/1/2019	37.22	37.23	405.88	405.89	0.01	405.89		221	*
P-71											
1Q17	444.94	1/16/2017	NE	40.05	NA	NA	NA	404.89	402.33 - 377.33 (42.61 - 67.61)	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		1/3/2018	NE	41.42	NA	NA	NA	403.52		6.0	*
2Q18		4/4/2018	NE	42.99	NA	NA	NA	401.95		50.4	
3Q18		7/3/2018	NE	43.36	NA	NA	NA	401.58		41.2	
4Q18		10/2/2018	NE	43.61	NA	NA	NA	401.33		108	
1Q19		1/3/2019	NE	43.73	NA	NA	NA	401.21		123	
2Q19		4/1/2019	NE	43.38	NA	NA	NA	401.56		350	
3Q19	445.09	7/1/2019	NE	40.85	NA	NA	NA	404.24	402.48 - 377.48 (42.61 - 67.61)	52.7	*
4Q19		10/1/2019	NE	38.67	NA	NA	NA	406.42		72.4	*
P-72											
1Q17	444.49	1/16/2017	NE	39.55	NA	NA	NA	404.94	398.72 - 373.72 (45.77 - 70.77)	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		1/3/2018	NE	40.84	NA	NA	NA	403.65		40.0	*
2Q18		4/4/2018	NE	42.81	NA	NA	NA	401.68		2.6	*
3Q18		7/3/2018	NE	42.90	NA	NA	NA	401.59		2.3	*
4Q18		10/3/2018	43.01	43.02	401.47	401.48	0.01	401.48		7.2	*
1Q19		1/3/2019	43.11	43.12	401.37	401.38	0.01	401.38		135	*
2Q19		4/1/2019	42.93	42.94	401.55	401.56	0.01	401.56		83.4	*
3Q19	444.70	7/1/2019	NE	40.20	NA	NA	NA	404.50	398.93 - 373.93 (45.77 - 70.77)	11.0	*
4Q19		10/2/2019	NM	NM	NA	NA	NA	NA		NM	Inaccess ble due to construction

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-73											
1Q17	443.86	1/16/2017	NE	40.00	NA	NA	NA	403.86	402.27 - 377.27 (41.59 - 66.59)	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		1/3/2018	NE	41.93	NA	NA	NA	401.93		67.8	
2Q18		4/4/2018	NE	43.21	NA	NA	NA	400.65		0.0	
3Q18		7/3/2018	NE	43.43	NA	NA	NA	400.43		0.0	
4Q18		10/3/2018	NE	43.24	NA	NA	NA	400.62		1.8	
1Q19		1/3/2019	NE	43.06	NA	NA	NA	400.80		6.6	
2Q19		4/2/2019	NE	42.70	NA	NA	NA	401.16		2.6	
3Q19	444.02	7/1/2019	NE	38.98	NA	NA	NA	405.04	402.42 - 377.42 (41.59 - 66.59)	488	*
4Q19		10/1/2019	NE	37.68	NA	NA	NA	406.34		226	*
P-74											
1Q17	442.72	1/16/2017	NE	38.64	NA	NA	NA	404.08	398.29 - 373.29 (44.43 - 69.43)	0.0	*
2Q17		4/3/2017	NE	38.88	NA	NA	NA	403.84		0.0	*
3Q17		7/5/2017	NE	38.04	NA	NA	NA	404.68		0.0	*
4Q17		10/2/2017	NE	37.43	NA	NA	NA	405.29		0.0	*
1Q18		1/3/2018	NE	40.21	NA	NA	NA	402.51		1.6	*
2Q18		4/4/2018	NE	39.81	NA	NA	NA	402.91	398.89 - 373.89 (43.83 - 68.83)	0.0	*
3Q18		7/2/2018	NE	42.35	NA	NA	NA	400.37		0.0	*
4Q18		10/2/2018	NE	42.18	NA	NA	NA	400.54		1.1	*
1Q19		1/3/2019	NE	41.95	NA	NA	NA	400.77		0.0	*
2Q19		4/1/2019	NE	40.46	NA	NA	NA	402.26		0.7	*Gauging result anomalous
3Q19	442.93	7/1/2019	NE	38.32	NA	NA	NA	404.61	399.10 - 374.10 (43.83 - 68.83)	0.0	*
4Q19		10/1/2019	NE	36.71	NA	NA	NA	406.22		0.2	*
P-75											
1Q17	446.42	1/17/2017	NE	42.25	NA	NA	NA	404.17	403.29 - 378.29 (43.13 - 68.13)	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		1/4/2018	NE	44.01	NA	NA	NA	402.41		3.0	
2Q18		4/4/2018	NE	45.06	NA	NA	NA	401.36		0.0	
3Q18		7/2/2018	NE	45.15	NA	NA	NA	401.27		0.0	
4Q18		10/3/2018	NE	45.06	NA	NA	NA	401.36		14.4	
1Q19		1/4/2019	NE	44.74	NA	NA	NA	401.68		4.6	
2Q19		4/2/2019	NE	44.43	NA	NA	NA	401.99		21.6	
3Q19	446.68	7/2/2019	NE	40.50	NA	NA	NA	406.18	403.55 - 378.55 (43.13 - 68.13)	10.5	*
4Q19		10/2/2019	NE	39.53	NA	NA	NA	407.15		5.7	*
P-82A											
1Q17	435.02	1/16/2017	NE	26.17	NA	NA	NA	408.85	401.81 - 386.81 (33.21 - 48.21)	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		1/3/2018	NE	27.54	NA	NA	NA	407.48		0.0	*
2Q18		4/3/2018	NE	27.83	NA	NA	NA	407.19		0.0	*
3Q18		7/2/2018	NE	28.14	NA	NA	NA	406.88		0.0	*
4Q18		10/3/2018	NE	28.38	NA	NA	NA	406.64		0.0	*
1Q19		1/4/2019	NE	28.25	NA	NA	NA	406.77		0.0	*
2Q19		4/2/2019	NE	27.83	NA	NA	NA	407.19		0.0	*
3Q19	434.94	7/1/2019	NE	24.08	NA	NA	NA	410.86	401.73 - 386.73 (33.21 - 48.21)	0.0	*
4Q19		10/1/2019	NE	23.86	NA	NA	NA	411.08		0.1	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-82B											
1Q17	434.48	1/16/2017	NE	25.88	NA	NA	NA	408.60	370.88 - 368.88 (63.60 - 65.60)	0.0	*
2Q17		4/4/2017	NE	26.61	NA	NA	NA	407.87		0.0	*
3Q17		7/6/2017	NE	24.42	NA	NA	NA	410.06		0.0	*
4Q17		10/3/2017	NE	25.70	NA	NA	NA	408.78		0.0	*
1Q18		1/3/2018	NE	27.26	NA	NA	NA	407.22		0.0	*
2Q18		4/3/2018	NE	27.54	NA	NA	NA	406.94	371.68 - 369.68 (62.80 - 64.80)	0.0	*
3Q18		7/2/2018	NE	27.85	NA	NA	NA	406.63		0.0	*
4Q18		10/3/2018	NE	28.09	NA	NA	NA	406.39		0.0	*
1Q19		1/4/2019	NE	27.97	NA	NA	NA	406.51		0.0	*
2Q19		4/2/2019	NE	27.55	NA	NA	NA	406.93		0.0	*
3Q19	434.68	7/1/2019	NE	23.78	NA	NA	NA	410.90	371.88 - 369.88 (62.80 - 64.80)	0.0	*
4Q19		10/1/2019	NE	23.59	NA	NA	NA	411.09		0.0	*
P-82C											
1Q17	434.21	1/16/2017	NE	25.60	NA	NA	NA	408.61	351.44 - 349.44 (82.77 - 84.77)	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		1/3/2018	NE	26.98	NA	NA	NA	407.23		0.0	*
2Q18		4/3/2018	NE	27.22	NA	NA	NA	406.99		0.0	*
3Q18		7/2/2018	NE	27.65	NA	NA	NA	406.56		0.0	*
4Q18		10/3/2018	NE	27.79	NA	NA	NA	406.42		0.0	*
1Q19		1/4/2019	NE	27.67	NA	NA	NA	406.54		0.0	*
2Q19		4/2/2019	NE	27.25	NA	NA	NA	406.96		0.0	*
3Q19	434.41	7/1/2019	NE	23.49	NA	NA	NA	410.92	351.64 - 349.64 (82.77 - 84.77)	0.0	*
4Q19		10/1/2019	NE	23.30	NA	NA	NA	411.11		0.0	*
P-82D											
1Q17	434.89	1/16/2017	NE	26.40	NA	NA	NA	408.49	323.47 - 321.47 (111.42 - 113.42)	0.0	*
2Q17		4/4/2017	NE	27.09	NA	NA	NA	407.80		0.0	*
3Q17		7/6/2017	NE	24.90	NA	NA	NA	409.99		0.0	*
4Q17		10/3/2017	NE	26.20	NA	NA	NA	408.69		0.0	*
1Q18		1/3/2018	NE	27.78	NA	NA	NA	407.11		0.0	*
2Q18		4/3/2018	NE	27.99	NA	NA	NA	406.90	323.35 - 321.35 (111.54 - 113.54)	0.0	*
3Q18		7/2/2018	NE	28.35	NA	NA	NA	406.54		0.0	*
4Q18		10/3/2018	NE	28.57	NA	NA	NA	406.32		0.0	*
1Q19		1/4/2019	NE	28.42	NA	NA	NA	406.47		0.0	*
2Q19		4/2/2019	NE	27.99	NA	NA	NA	406.90		0.0	*
3Q19	435.09	7/1/2019	NE	24.20	NA	NA	NA	410.89	323.55 - 321.55 (111.54 - 113.54)	0.0	*
4Q19		10/1/2019	NE	24.02	NA	NA	NA	411.07		0.0	*
P-83A											
1Q17	445.36	1/16/2017	NE	39.25	NA	NA	NA	406.11	398.71 - 383.71 (46.65 - 61.65)	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		0.0	*
1Q18		1/3/2018	NE	39.76	NA	NA	NA	405.60		0.0	*
2Q18		4/2/2018	NE	40.74	NA	NA	NA	404.62		0.0	*
3Q18		7/2/2018	NE	42.59	NA	NA	NA	402.77		0.0	*
4Q18		10/1/2018	NE	43.03	NA	NA	NA	402.33		0.0	*
1Q19		1/2/2019	NE	43.55	NA	NA	NA	401.81		0.0	*
2Q19		4/2/2019	NE	43.34	NA	NA	NA	402.02		0.0	*
3Q19	445.54	7/1/2019	NE	41.95	NA	NA	NA	403.59	398.14 - 383.14 (47.40 - 62.40)	0.0	*
4Q19		10/2/2019	NE	40.55	NA	NA	NA	404.99		0.0	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-83B											
1Q17	445.55	1/16/2017	NE	39.48	NA	NA	NA	406.07	375.90 - 373.90 (69.65 - 71.65)	0.4	*
2Q17		4/3/2017	NE	39.83	NA	NA	NA	405.72		11.0	*
3Q17		7/6/2017	NE	38.71	NA	NA	NA	406.84		0.0	*
4Q17		10/3/2017	NE	39.13	NA	NA	NA	406.42		0.0	*
1Q18		1/3/2018	NE	40.01	NA	NA	NA	405.54		0.6	*
2Q18		4/2/2018	NE	41.01	NA	NA	NA	404.54	371.75 - 369.75 (73.80 - 75.80)	0.0	*
3Q18		7/2/2018	NE	42.83	NA	NA	NA	402.72		0.0	*
4Q18		10/1/2018	NE	43.29	NA	NA	NA	402.26		0.0	*
1Q19		1/2/2019	NE	43.80	NA	NA	NA	401.75		0.0	*
2Q19		4/2/2019	NE	43.59	NA	NA	NA	401.96		0.0	*
3Q19	445.77	7/1/2019	NE	42.20	NA	NA	NA	403.57	371.97 - 369.97 (73.80 - 75.80)	0.0	*
4Q19		10/2/2019	NE	40.80	NA	NA	NA	404.97		0.0	*
P-83C											
1Q17	445.78	1/16/2017	NE	39.63	NA	NA	NA	406.15	353.39 - 351.39 (92.39 - 94.39)	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		1/3/2018	NE	40.16	NA	NA	NA	405.62		0.0	*
2Q18		4/2/2018	NE	41.15	NA	NA	NA	404.63		0.0	*
3Q18		7/2/2018	NE	42.99	NA	NA	NA	402.79		0.0	*
4Q18		10/1/2018	NE	43.44	NA	NA	NA	402.34		0.0	*
1Q19		1/2/2019	NE	43.95	NA	NA	NA	401.83		0.0	*
2Q19		4/2/2019	NE	43.75	NA	NA	NA	402.03		0.0	*
3Q19	445.95	7/1/2019	NE	42.44	NA	NA	NA	403.51	353.56 - 351.56 (92.39 - 94.39)	0.0	*
4Q19		10/2/2019	NE	40.96	NA	NA	NA	404.99		0.0	*
P-83D											
1Q17	445.70	1/16/2017	NE	39.59	NA	NA	NA	406.11	311.99 - 309.99 (133.71 - 135.71)	1.2	*
2Q17		4/3/2017	NE	39.94	NA	NA	NA	405.76		0.0	*
3Q17		7/6/2017	NE	38.51	NA	NA	NA	407.19		0.0	*
4Q17		10/3/2017	NE	39.25	NA	NA	NA	406.45		0.0	*
1Q18		1/3/2018	NE	40.11	NA	NA	NA	405.59		0.0	*
2Q18		4/2/2018	NE	41.13	NA	NA	NA	404.57	311.90 - 309.90 (133.80 - 135.80)	0.0	*
3Q18		7/2/2018	NE	43.96	NA	NA	NA	401.74		0.0	*
4Q18		10/1/2018	NE	43.41	NA	NA	NA	402.29		0.0	*
1Q19		1/2/2019	NE	43.93	NA	NA	NA	401.77		0.0	*
2Q19		4/2/2019	NE	43.72	NA	NA	NA	401.98		0.0	*
3Q19	445.86	7/1/2019	NE	42.40	NA	NA	NA	403.46	312.06 - 310.06 (133.80 - 135.80)	0.0	*
4Q19		10/2/2019	NE	40.94	NA	NA	NA	404.92		0.0	*
P-84A											
1Q17	446.49	1/17/2017	NE	40.34	NA	NA	NA	406.15	397.99 - 382.99 (48.50 - 63.50)	0.0	*
2Q17		4/4/2017	NE	40.80	NA	NA	NA	405.69		0.0	*
3Q17		7/5/2017	NM	NM	NA	NA	NA	NA		NM	Inaccess ble due to construction
4Q17		10/3/2017	NE	39.69	NA	NA	NA	406.80		0.0	*
1Q18		1/3/2018	NE	40.84	NA	NA	NA	405.65		0.1	*
2Q18		4/4/2018	NE	42.22	NA	NA	NA	404.27	397.57 - 382.57 (48.92 - 63.92)	0.0	*
3Q18		7/3/2018	NE	43.16	NA	NA	NA	403.33		0.0	*
4Q18		10/3/2018	NE	43.55	NA	NA	NA	402.94		0.0	*
1Q19		1/3/2019	NE	43.79	NA	NA	NA	402.70		0.0	*
2Q19		4/2/2019	NE	43.79	NA	NA	NA	402.70		0.0	*
3Q19	446.63	7/1/2019	NE	41.69	NA	NA	NA	404.94	397.71 - 382.71 (48.92 - 63.92)	0.0	*
4Q19		10/1/2019	NE	40.00	NA	NA	NA	406.63		0.0	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-84B											
1Q17	446.21	1/17/2017	NE	40.08	NA	NA	NA	406.13	372.71 - 370.71 (73.50 - 75.50)	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		1/3/2018	NE	40.56	NA	NA	NA	405.65		0.1	*
2Q18		4/4/2018	NE	41.94	NA	NA	NA	404.27		0.0	*
3Q18		7/3/2018	NE	42.90	NA	NA	NA	403.31		0.0	*
4Q18		10/3/2018	NE	43.28	NA	NA	NA	402.93		0.0	*
1Q19		1/3/2019	NE	43.51	NA	NA	NA	402.70		0.1	*
2Q19		4/2/2019	NE	43.51	NA	NA	NA	402.70		0.0	*
3Q19	446.35	7/1/2019	NE	41.41	NA	NA	NA	404.94	372.85 - 370.85 (73.50 - 75.50)	0.0	*
4Q19		10/1/2019	NE	39.72	NA	NA	NA	406.63		0.0	*
P-84C											
1Q17	446.22	1/17/2017	NE	40.08	NA	NA	NA	406.14	352.17 - 350.17 (94.05 - 96.05)	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		1/3/2018	NE	40.57	NA	NA	NA	405.65		0.0	*
2Q18		4/4/2018	NE	41.96	NA	NA	NA	404.26		0.0	*
3Q18		7/3/2018	NE	43.89	NA	NA	NA	402.33		0.0	*
4Q18		10/3/2018	NE	43.28	NA	NA	NA	402.94		0.0	*
1Q19		1/3/2019	NE	43.53	NA	NA	NA	402.69		0.1	*
2Q19		4/2/2019	NE	43.52	NA	NA	NA	402.70		0.0	*
3Q19	446.37	7/1/2019	NE	41.45	NA	NA	NA	404.92	352.32 - 350.32 (94.05 - 96.05)	0.0	*
4Q19		10/1/2019	NE	39.75	NA	NA	NA	406.62		0.0	*
P-84D											
1Q17	446.24	1/17/2017	NM	NM	NA	NA	NA	NA	325.09 - 323.09 (121.15 - 123.15)	NM	
2Q17		4/4/2017	NE	40.55	NA	NA	NA	405.69		0.0	*
3Q17		7/5/2017	NM	NM	NA	NA	NA	NA		NM	Inaccess ble due to construction
4Q17		10/3/2017	NE	39.45	NA	NA	NA	406.79		0.0	*
1Q18		1/3/2018	NE	40.58	NA	NA	NA	405.66		0.1	*
2Q18		4/4/2018	NE	41.97	NA	NA	NA	404.27	325.41 - 323.41 (120.83 - 122.83)	0.0	*
3Q18		7/3/2018	NE	42.89	NA	NA	NA	403.35		0.0	*
4Q18		10/3/2018	NE	43.28	NA	NA	NA	402.96		0.0	*
1Q19		1/3/2019	NE	43.51	NA	NA	NA	402.73		NM	*
2Q19		4/2/2019	NE	43.52	NA	NA	NA	402.72		0.0	*
3Q19	446.38	7/1/2019	NE	41.42	NA	NA	NA	404.96	325.55 - 323.55 (120.83 - 122.83)	0.0	*
4Q19		10/1/2019	NE	39.73	NA	NA	NA	406.65		0.0	*
P-88A											
1Q17	443.09	1/17/2017	NE	31.75	NA	NA	NA	411.34	404.69 - 389.69 (38.40 - 53.40)	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		1/4/2018	NE	32.60	NA	NA	NA	410.49		0.0	*
2Q18		4/4/2018	NE	34.04	NA	NA	NA	409.05		0.0	*
3Q18		7/2/2018	NE	33.86	NA	NA	NA	409.23		0.0	*
4Q18		10/3/2018	NE	34.01	NA	NA	NA	409.08		0.0	*
1Q19		1/4/2019	NE	34.31	NA	NA	NA	408.78		0.0	*
2Q19		4/2/2019	NE	34.22	NA	NA	NA	408.87		0.0	*
3Q19	443.27	7/2/2019	NE	31.34	NA	NA	NA	411.93	404.87 - 389.87 (38.40 - 53.40)	0.0	*
4Q19		10/2/2019	NE	30.41	NA	NA	NA	412.86		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-88B											
1Q17	443.16	1/17/2017	NE	31.81	NA	NA	NA	411.35	371.16 - 369.16 (72.00 - 74.00)	3.5	*
2Q17		4/4/2017	NE	32.43	NA	NA	NA	410.73		0.0	*
3Q17		7/6/2017	NE	30.64	NA	NA	NA	412.52		0.0	*
4Q17		10/2/2017	NE	31.15	NA	NA	NA	412.01		0.0	*
1Q18		1/4/2018	NE	32.67	NA	NA	NA	410.49		0.0	*
2Q18		4/4/2018	NE	34.09	NA	NA	NA	409.07	371.51 - 369.51 (71.65 - 73.65)	0.0	*
3Q18		7/2/2018	NE	33.84	NA	NA	NA	409.32		0.0	*
4Q18		10/3/2018	NE	34.08	NA	NA	NA	409.08		0.1	*
1Q19		1/4/2019	NE	34.37	NA	NA	NA	408.79		0.0	*
2Q19		4/2/2019	NE	34.29	NA	NA	NA	408.87		0.0	*
3Q19	443.35	7/2/2019	NE	31.41	NA	NA	NA	411.94	371.70 - 369.70 (71.65 - 73.65)	0.0	*
4Q19		10/2/2019	NE	30.47	NA	NA	NA	412.88		0.0	*
P-88C											
1Q17	443.13	1/17/2017	NE	31.77	NA	NA	NA	411.36	350.83 - 348.83 (92.30 - 94.30)	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		1/4/2018	NE	32.62	NA	NA	NA	410.51		0.0	*
2Q18		4/4/2018	NE	34.05	NA	NA	NA	409.08		0.0	*
3Q18		7/2/2018	NE	33.88	NA	NA	NA	409.25		0.0	*
4Q18		10/3/2018	NE	34.02	NA	NA	NA	409.11		0.0	*
1Q19		1/4/2019	NE	34.32	NA	NA	NA	408.81		0.0	*
2Q19		4/2/2019	NE	34.24	NA	NA	NA	408.89		0.0	*
3Q19	443.31	7/2/2019	NE	31.37	NA	NA	NA	411.94	351.01 - 349.01 (92.30 - 94.30)	0.0	*
4Q19		10/2/2019	NE	30.44	NA	NA	NA	412.87		0.0	*
P-88D											
1Q17	443.20	1/17/2017	NE	31.91	NA	NA	NA	411.29	329.50 - 327.50 (113.70 - 115.70)	0.0	*
2Q17		4/4/2017	NE	32.54	NA	NA	NA	410.66		0.0	*
3Q17		7/6/2017	NE	30.69	NA	NA	NA	412.51		0.0	*
4Q17		10/2/2017	NE	31.29	NA	NA	NA	411.91		0.0	*
1Q18		1/4/2018	NE	32.82	NA	NA	NA	410.38		0.0	*
2Q18		4/4/2018	NE	34.17	NA	NA	NA	409.03	331.03 - 329.03 (112.17 - 114.17)	0.0	*
3Q18		7/2/2018	NE	34.09	NA	NA	NA	409.11		0.0	*
4Q18		10/3/2018	NE	34.26	NA	NA	NA	408.94		0.0	*
1Q19		1/4/2019	NE	34.45	NA	NA	NA	408.75		0.0	*
2Q19		4/2/2019	NE	34.30	NA	NA	NA	408.90		0.0	*
3Q19	443.38	7/2/2019	NE	31.35	NA	NA	NA	412.03	331.21 - 329.21 (112.17 - 114.17)	0.0	*
4Q19		10/2/2019	NE	30.56	NA	NA	NA	412.82		0.0	*
P-89B											
1Q17	447.44	1/17/2017	NE	38.76	NA	NA	NA	408.68	370.08 - 368.08 (77.36 - 79.36)	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		1/4/2018	NE	39.23	NA	NA	NA	408.21		0.0	*
2Q18		4/3/2018	NE	40.47	NA	NA	NA	406.97		0.0	*
3Q18		7/3/2018	NE	41.39	NA	NA	NA	406.05		0.0	*
4Q18		10/2/2018	NE	41.74	NA	NA	NA	405.70		0.0	*
1Q19		1/3/2019	NE	42.63	NA	NA	NA	404.81		0.0	*
2Q19		4/2/2019	NE	42.41	NA	NA	NA	405.03		0.0	*
3Q19	447.64	7/2/2019	NE	41.60	NA	NA	NA	406.04	370.28 - 368.28 (77.36 - 79.36)	0.0	*
4Q19		10/2/2019	NE	40.11	NA	NA	NA	407.53		0.0	*

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QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-89C											
1Q17	447.76	1/17/2017	NE	39.11	NA	NA	NA	408.65	350.13 - 348.13 (97.63 - 99.63)	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		0.0	*
1Q18		1/4/2018	NE	39.65	NA	NA	NA	408.11		0.0	*
2Q18		4/3/2018	NE	40.79	NA	NA	NA	406.97		0.0	*
3Q18		7/3/2018	NE	42.09	NA	NA	NA	405.67		0.0	*
4Q18		10/2/2018	NE	42.11	NA	NA	NA	405.65		0.0	*
1Q19		1/3/2019	NE	43.03	NA	NA	NA	404.73		0.0	*
2Q19		4/2/2019	NE	42.75	NA	NA	NA	405.01	351.36 - 349.36 (96.40 - 98.40)	0.0	*
3Q19	447.96	7/2/2019	NE	41.95	NA	NA	NA	406.01	351.56 - 349.56 (96.40 - 98.40)	0.0	*
4Q19		10/2/2019	NE	40.46	NA	NA	NA	407.50		0.0	*
P-89D											
1Q17	447.63	1/17/2017	NE	39.03	NA	NA	NA	408.60	307.29 - 305.29 (140.34 - 142.34)	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		1/4/2018	NE	39.48	NA	NA	NA	408.15		2.0	*
2Q18		4/3/2018	NE	40.95	NA	NA	NA	406.68		0.0	*
3Q18		7/3/2018	NE	41.76	NA	NA	NA	405.87		0.0	*
4Q18		10/2/2018	NE	42.15	NA	NA	NA	405.48		0.0	*
1Q19		1/3/2019	NE	43.11	NA	NA	NA	404.52		0.0	*
2Q19		4/2/2019	NE	42.87	NA	NA	NA	404.76		0.0	*
3Q19	447.83	7/2/2019	NE	42.05	NA	NA	NA	405.78	309.33 - 307.33 (138.50 - 140.50)	0.0	*
4Q19		10/2/2019	NE	40.53	NA	NA	NA	407.30		0.0	*
P-91A											
1Q17	447.24	1/16/2017	NE	43.81	NA	NA	NA	403.43	395.72 - 380.72 (51.51 - 66.51)	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		1/2/2018	44.43	44.45	402.79	402.81	0.02	402.81		25.8	*
2Q18		4/3/2018	NE	45.39	NA	NA	NA	401.85		43.1	*
3Q18		7/2/2018	NE	48.52	NA	NA	NA	398.72		151	*
4Q18		10/1/2018	NE	48.70	NA	NA	NA	398.54		5.6	*
1Q19		1/2/2019	48.87	48.90	398.34	398.37	0.03	398.36		1129	*
2Q19		4/2/2019	48.58	48.59	398.65	398.66	0.01	398.66		413	*
3Q19	447.43	7/1/2019	47.77	47.78	399.65	399.66	0.01	399.66	395.92 - 380.92 (51.51 - 66.51)	14.7	*
4Q19		10/2/2019	NE	45.72	NA	NA	NA	401.71		9.5	*
P-91B											
1Q17	447.28	1/16/2017	NE	43.93	NA	NA	NA	403.35	372.59 - 370.59 (74.69 - 76.69)	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		1/2/2018	NE	44.23	NA	NA	NA	403.05		102	*
2Q18		4/3/2018	NE	45.45	NA	NA	NA	401.83		0.5	*
3Q18		7/2/2018	NE	48.69	NA	NA	NA	398.59		11.0	*
4Q18		10/1/2018	NE	48.88	NA	NA	NA	398.40		12.1	*
1Q19		1/2/2019	NE	49.04	NA	NA	NA	398.24		73.3	*
2Q19		4/2/2019	NE	48.75	NA	NA	NA	398.53		116	*
3Q19	447.47	7/1/2019	NE	47.97	NA	NA	NA	399.50	372.78 - 370.78 (74.69 - 76.69)	3.5	*
4Q19		10/2/2019	NE	45.89	NA	NA	NA	401.58		6.5	*

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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											
1Q17	447.07	1/16/2017	NE	43.62	NA	NA	NA	403.45	352.34 - 350.34 (94.73 - 96.73)	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		1/2/2018	NE	44.00	NA	NA	NA	403.07		9.5	*
2Q18		4/3/2018	NE	45.21	NA	NA	NA	401.86		0.0	*
3Q18		7/2/2018	NE	48.44	NA	NA	NA	398.63		0.0	*
4Q18		10/1/2018	NE	48.61	NA	NA	NA	398.46		0.0	*
1Q19		1/2/2019	NE	48.80	NA	NA	NA	398.27		1.2	*
2Q19		4/2/2019	NE	48.47	NA	NA	NA	398.60		0.0	*
3Q19	447.27	7/1/2019	NE	47.69	NA	NA	NA	399.58	352.54 - 350.54 (94.73 - 96.73)	0.0	*
4Q19		10/2/2019	NE	45.63	NA	NA	NA	401.64		0.0	*
P-91D											
1Q17	447.06	1/16/2017	NE	43.67	NA	NA	NA	403.39	278.74 - 276.74 (168.32 - 170.32)	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		1/2/2018	NE	43.98	NA	NA	NA	403.08		3.4	*
2Q18		4/3/2018	NE	45.20	NA	NA	NA	401.86		0.0	*
3Q18		7/2/2018	NE	48.41	NA	NA	NA	398.65		0.0	*
4Q18		10/1/2018	NE	48.56	NA	NA	NA	398.50		0.0	*
1Q19		1/2/2019	NE	48.76	NA	NA	NA	398.30		1.6	*
2Q19		4/2/2019	NE	48.44	NA	NA	NA	398.62		0.0	*
3Q19	447.26	7/1/2019	NE	47.66	NA	NA	NA	399.60	278.94 - 276.94 (168.32 - 170.32)	0.0	*
4Q19		10/2/2019	NE	45.60	NA	NA	NA	401.66		0.0	*
P-92A											
1Q17	446.24	1/17/2017	42.19	42.22	404.02	404.05	0.03	404.04	398.67 - 383.67 (47.57 - 62.57)	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		1/3/2018	42.91	42.94	403.30	403.33	0.03	403.32		119	*
2Q18		4/4/2018	44.83	44.84	401.40	401.41	0.01	401.41		31.5	*
3Q18		7/3/2018	NE	45.69	NA	NA	NA	400.55		4.0	*
4Q18		10/2/2018	46.04	46.06	400.18	400.20	0.02	400.20		33.8	*
1Q19		1/2/2019	46.39	46.41	399.83	399.85	0.02	399.85		640	*
2Q19		4/1/2019	46.10	46.11	400.13	400.14	0.01	400.14		232	*
3Q19	446.39	7/1/2019	44.54	44.56	401.83	401.85	0.02	401.85	398.82 - 383.82 (47.57 - 62.57)	36.4	*
4Q19		10/2/2019	42.50	42.51	403.88	403.89	0.01	403.89		11.1	*
P-92B											
1Q17	446.18	1/17/2017	NE	42.18	NA	NA	NA	404.00	372.53 - 370.53 (73.65 - 75.65)	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		0.0	*
1Q18		1/3/2018	NE	42.89	NA	NA	NA	403.29		0.2	*
2Q18		4/4/2018	NE	44.79	NA	NA	NA	401.39		0.0	*
3Q18		7/3/2018	NE	45.65	NA	NA	NA	400.53		0.5	*
4Q18		10/2/2018	NE	46.01	NA	NA	NA	400.17		0.1	*
1Q19		1/2/2019	NE	46.34	NA	NA	NA	399.84		0.0	*
2Q19		4/1/2019	NE	46.06	NA	NA	NA	400.12		1.9	*
3Q19	446.33	7/1/2019	NE	44.53	NA	NA	NA	401.80	371.92 - 369.92 (74.41 - 76.41)	0.3	*
4Q19		10/2/2019	NE	42.46	NA	NA	NA	403.87		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-92C											
1Q17	446.17	1/17/2017	NE	42.16	NA	NA	NA	404.01	353.21 - 348.21 (92.96 - 97.96)	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		1/3/2018	NE	42.88	NA	NA	NA	403.29		1.2	*
2Q18		4/4/2018	NE	44.76	NA	NA	NA	401.41		0.0	*
3Q18		7/3/2018	NE	45.60	NA	NA	NA	400.57		0.3	*
4Q18		10/2/2018	NE	45.97	NA	NA	NA	400.20		2.5	*
1Q19		1/2/2019	NE	46.34	NA	NA	NA	399.83		83.1	*
2Q19		4/1/2019	NE	46.03	NA	NA	NA	400.14		22.6	*
3Q19	446.34	7/1/2019	NE	44.51	NA	NA	NA	401.83	353.38 - 348.38 (92.96 - 97.96)	4.0	*
4Q19		10/2/2019	NE	42.45	NA	NA	NA	403.89		0.0	*
P-92D											
1Q17	446.00	1/17/2017	NE	42.04	NA	NA	NA	403.96	305.00 - 303.00 (141.00 - 143.00)	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		1/3/2018	NE	42.70	NA	NA	NA	403.30		0.2	*
2Q18		4/4/2018	NE	44.61	NA	NA	NA	401.39		0.0	*
3Q18		7/3/2018	NE	45.50	NA	NA	NA	400.50		0.0	*
4Q18		10/2/2018	NE	45.88	NA	NA	NA	400.12		0.1	*
1Q19		1/2/2019	NE	46.24	NA	NA	NA	399.76		0.0	*
2Q19		4/1/2019	NE	45.94	NA	NA	NA	400.06		0.2	*
3Q19	446.15	7/1/2019	NE	44.45	NA	NA	NA	401.70	305.15 - 303.15 (141.00 - 143.00)	0.0	*
4Q19		10/2/2019	NE	42.35	NA	NA	NA	403.80		0.0	*
P-93A											
1Q17	445.12	1/16/2017	NE	41.04	NA	NA	NA	404.08	402.05 - 392.05 (43.07 - 53.07)	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		1/4/2018	NE	42.79	NA	NA	NA	402.33		12.8	*
2Q18		4/2/2018	NE	43.58	NA	NA	NA	401.54		21.1	
3Q18		7/2/2018	NE	44.03	NA	NA	NA	401.09		0.0	
4Q18		10/2/2018	NE	43.98	NA	NA	NA	401.14		0.0	
1Q19		1/2/2019	NE	43.83	NA	NA	NA	401.29		0.0	
2Q19		4/1/2019	NE	43.61	NA	NA	NA	401.51		0.3	
3Q19	445.37	7/1/2019	NE	39.40	NA	NA	NA	405.97	402.30 - 392.30 (43.07 - 53.07)	0.0	*
4Q19		10/1/2019	NE	38.34	NA	NA	NA	407.03		1.7	*
P-93B											
1Q17	446.52	1/16/2017	NE	42.41	NA	NA	NA	404.11	371.92 - 369.92 (74.60 - 76.60)	0.1	*
2Q17		4/3/2017	NE	42.51	NA	NA	NA	404.01		0.0	*
3Q17		7/5/2017	NE	41.45	NA	NA	NA	405.07		0.0	*
4Q17		10/2/2017	NE	41.88	NA	NA	NA	404.64		0.0	*
1Q18		1/3/2018	NE	44.25	NA	NA	NA	402.27		0.0	*
2Q18		4/2/2018	NE	44.94	NA	NA	NA	401.58	371.64 - 369.64 (74.88 - 76.88)	0.0	*
3Q18		7/2/2018	NE	45.60	NA	NA	NA	400.92		0.5	*
4Q18		10/2/2018	NE	45.36	NA	NA	NA	401.16		0.0	*
1Q19		1/2/2019	NE	45.19	NA	NA	NA	401.33		12.5	*
2Q19		4/1/2019	NE	44.99	NA	NA	NA	401.53		0.0	*
3Q19	446.70	7/1/2019	NE	40.31	NA	NA	NA	406.39	371.92 - 369.92 (74.78 - 76.78)	0.1	*
4Q19		10/1/2019	NE	39.67	NA	NA	NA	407.03		0.1	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-93C											
1Q17	446.28	1/16/2017	NE	42.20	NA	NA	NA	404.08	353.81 - 348.81 (92.47 - 97.47)	12.6	*
2Q17		4/3/2017	NE	42.31	NA	NA	NA	403.97		0.0	*
3Q17		7/5/2017	NE	41.26	NA	NA	NA	405.02		0.0	*
4Q17		10/2/2017	NE	41.68	NA	NA	NA	404.60		0.0	*
1Q18		1/3/2018	NE	43.77	NA	NA	NA	402.51		0.3	*
2Q18		4/2/2018	NE	44.78	NA	NA	NA	401.50	353.40 - 348.40 (92.88 - 97.88)	0.0	*
3Q18		7/2/2018	NE	45.28	NA	NA	NA	401.00		0.0	*
4Q18		10/2/2018	NE	45.19	NA	NA	NA	401.09		0.0	*
1Q19		1/2/2019	NE	45.02	NA	NA	NA	401.26		0.0	*
2Q19		4/1/2019	NE	44.81	NA	NA	NA	401.47		0.0	*
3Q19	446.55	7/1/2019	NE	40.59	NA	NA	NA	405.96	353.67 - 348.67 (92.88 - 97.88)	0.0	*
4Q19		10/1/2019	NE	39.51	NA	NA	NA	407.04		0.0	*
P-93D											
1Q17	446.73	1/16/2017	NE	42.59	NA	NA	NA	404.14	320.98 - 318.98 (125.75 - 127.75)	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		1/3/2018	NE	44.19	NA	NA	NA	402.54		0.0	*
2Q18		4/2/2018	NE	45.12	NA	NA	NA	401.61		0.0	*
3Q18		7/2/2018	NE	45.67	NA	NA	NA	401.06		0.0	*
4Q18		10/2/2018	NE	45.57	NA	NA	NA	401.16		0.0	*
1Q19		1/2/2019	NE	45.36	NA	NA	NA	401.37		0.0	*
2Q19		4/1/2019	NE	45.18	NA	NA	NA	401.55		0.0	*
3Q19	446.97	7/1/2019	NE	40.97	NA	NA	NA	406.00	321.22 - 319.22 (125.75 - 127.75)	0.0	*
4Q19		10/1/2019	NE	39.87	NA	NA	NA	407.10		0.0	*
P-94											
1Q17	445.14	1/16/2017	NE	35.04	NA	NA	NA	410.10	399.29 - 384.29 (45.85 - 60.85)	0.0	*
2Q17		4/3/2017	NE	35.64	NA	NA	NA	409.50		0.0	*
3Q17		7/6/2017	NE	33.00	NA	NA	NA	412.14		0.0	*
4Q17		10/3/2017	NE	34.60	NA	NA	NA	410.54		0.0	*
1Q18		1/3/2018	NE	35.80	NA	NA	NA	409.34		0.0	*
2Q18		4/2/2018	NE	37.09	NA	NA	NA	408.05	398.90 - 383.90 (46.24 - 61.24)	0.0	*
3Q18		7/2/2018	NE	37.80	NA	NA	NA	407.34		0.0	*
4Q18		10/1/2018	NE	38.36	NA	NA	NA	406.78		0.0	*
1Q19		1/2/2019	NE	39.49	NA	NA	NA	405.65		0.0	*
2Q19		4/2/2019	NE	39.18	NA	NA	NA	405.96		0.0	*
3Q19	445.04	7/1/2019	NE	37.01	NA	NA	NA	408.03	398.80 - 383.80 (46.24 - 61.24)	0.0	*
4Q19		10/2/2019	NE	36.86	NA	NA	NA	408.18		0.0	*
P-95											
1Q17	443.42	1/17/2017	NE	29.71	NA	NA	NA	413.71	406.90 - 391.90 (36.52 - 51.52)	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		1/4/2018	NE	30.53	NA	NA	NA	412.89		0.0	*
2Q18		4/4/2018	NE	32.02	NA	NA	NA	411.40		0.0	*
3Q18		7/2/2018	NE	31.87	NA	NA	NA	411.55		0.0	*
4Q18		10/3/2018	NE	32.03	NA	NA	NA	411.39		0.1	*
1Q19		1/4/2019	NE	32.63	NA	NA	NA	410.79		0.0	*
2Q19		4/2/2019	NE	32.49	NA	NA	NA	410.93		0.0	*
3Q19	443.95	7/2/2019	NE	30.02	NA	NA	NA	413.93	407.43 - 392.43 (36.52 - 51.52)	0.0	*
4Q19		10/2/2019	NE	28.89	NA	NA	NA	415.06		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-102											
1Q17	444.97	1/17/2017	NE	33.00	NA	NA	NA	411.97	402.22 - 382.22 (42.75 - 62.75)	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		1/4/2018	NE	33.41	NA	NA	NA	411.56		363	*
2Q18		4/4/2018	NE	35.06	NA	NA	NA	409.91		0.2	*
3Q18		7/2/2018	NE	35.09	NA	NA	NA	409.88		0.0	*
4Q18		10/3/2018	NE	35.32	NA	NA	NA	409.65		6.3	*
1Q19		1/4/2019	NE	36.10	NA	NA	NA	408.87		0.2	*
2Q19		4/2/2019	NE	36.06	NA	NA	NA	408.91		0.0	*
3Q19	445.14	7/2/2019	NE	34.23	NA	NA	NA	410.91	402.39 - 382.39 (42.75 - 62.75)	0.5	*
4Q19		10/2/2019	NE	32.95	NA	NA	NA	412.19		0.1	*
P-114R											
1Q17	429.26	1/17/2017	NE	24.81	NA	NA	NA	404.45	406.25 - 396.25 (23.01 - 33.01)	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		1/3/2018	NE	26.16	NA	NA	NA	403.10		9.0	
2Q18		4/9/2018	NE	26.76	NA	NA	NA	402.50		0.1	
3Q18		7/2/2018	NE	26.50	NA	NA	NA	402.76		0.0	
4Q18		10/2/2018	NE	26.26	NA	NA	NA	403.00		0.0	
1Q19		1/3/2019	NE	26.02	NA	NA	NA	403.24		38.7	
2Q19		4/2/2019	NE	25.47	NA	NA	NA	403.79		132	
3Q19	429.48	7/1/2019	NE	19.67	NA	NA	NA	409.81	406.47 - 396.47 (23.01 - 33.01)	1.5	*
4Q19		10/2/2019	NE	20.49	NA	NA	NA	408.99		0.0	*
P-115											
1Q17	433.36	1/17/2017	NE	28.88	NA	NA	NA	404.48	401.06 - 381.06 (32.30 - 52.30)	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		1/3/2018	NE	30.22	NA	NA	NA	403.14		0.0	*
2Q18		4/4/2018	NE	31.03	NA	NA	NA	402.33		0.0	*
3Q18		7/2/2018	NE	30.38	NA	NA	NA	402.98		0.0	*
4Q18		10/2/2018	NE	30.07	NA	NA	NA	403.29		0.0	*
1Q19		1/3/2019	NE	29.83	NA	NA	NA	403.53		0.0	*
2Q19		4/2/2019	NE	29.08	NA	NA	NA	404.28		0.0	*
3Q19	433.54	7/1/2019	NE	23.18	NA	NA	NA	410.36	401.24 - 381.24 (32.30 - 52.30)	0.0	*
4Q19		10/2/2019	NE	24.34	NA	NA	NA	409.20		0.0	*
P-116											
1Q17	436.63	1/17/2017	NE	32.37	NA	NA	NA	404.26	399.19 - 379.19 (37.44 - 57.44)	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		1/3/2018	NE	33.69	NA	NA	NA	402.94		0.0	*
2Q18		4/4/2018	NE	34.47	NA	NA	NA	402.16		0.0	*
3Q18		7/2/2018	NE	33.74	NA	NA	NA	402.89		0.0	*
4Q18		10/2/2018	NE	33.38	NA	NA	NA	403.25		0.0	*
1Q19		1/3/2019	NE	33.18	NA	NA	NA	403.45		0.1	*
2Q19		4/3/2019	NE	32.53	NA	NA	NA	404.10		0.0	*
3Q19	436.79	7/1/2019	NE	26.27	NA	NA	NA	410.52	399.35 - 379.35 (37.44 - 57.44)	0.0	*
4Q19		10/2/2019	NE	27.66	NA	NA	NA	409.13		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-117											
1Q17	432.71	1/17/2017	NE	28.55	NA	NA	NA	404.16	399.78 - 379.78 (32.93 - 52.93)	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		1/3/2018	NE	29.90	NA	NA	NA	402.81		0.0	*
2Q18		4/4/2018	NE	30.68	NA	NA	NA	402.03		0.0	*
3Q18		7/2/2018	NE	29.92	NA	NA	NA	402.79		0.0	*
4Q18		10/2/2018	NE	29.56	NA	NA	NA	403.15		0.0	*
1Q19		1/3/2019	NE	29.37	NA	NA	NA	403.34		0.4	*
2Q19		4/2/2019	NE	28.45	NA	NA	NA	404.26		0.0	*
3Q19	432.87	7/1/2019	NE	22.26	NA	NA	NA	410.61	399.94 - 379.94 (32.93 - 52.93)	0.0	*
4Q19		10/2/2019	NE	23.79	NA	NA	NA	409.08		0.0	*
P-118											
1Q17	431.31	1/17/2017	NE	27.61	NA	NA	NA	403.70	400.19 - 384.26 (31.12 - 47.05)	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		1/3/2018	NE	28.99	NA	NA	NA	402.32		0.0	*
2Q18		4/4/2018	NE	29.57	NA	NA	NA	401.74		0.0	*
3Q18		7/2/2018	NE	28.63	NA	NA	NA	402.68		0.0	*
4Q18		10/3/2018	NE	28.11	NA	NA	NA	403.20		0.0	*
1Q19		1/3/2019	NE	28.03	NA	NA	NA	403.28		0.3	*
2Q19		4/3/2019	NE	26.92	NA	NA	NA	404.39		0.0	*
3Q19	431.48	7/1/2019	NE	20.11	NA	NA	NA	411.37	400.36 - 384.43 (31.12 - 47.05)	0.0	*
4Q19		10/2/2019	NE	22.37	NA	NA	NA	409.11		0.0	*
P-119											
1Q17	431.90	1/17/2017	NE	26.92	NA	NA	NA	404.98	401.23 - 385.30 (30.67 - 46.60)	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		1/3/2018	NE	28.27	NA	NA	NA	403.63		0.0	*
2Q18		4/4/2018	NE	29.24	NA	NA	NA	402.66		0.0	*
3Q18		7/2/2018	NE	29.03	NA	NA	NA	402.87		0.0	*
4Q18		10/2/2018	NE	28.88	NA	NA	NA	403.02		0.0	*
1Q19		1/3/2019	NE	28.62	NA	NA	NA	403.28		0.5	*
2Q19		4/3/2019	NE	28.33	NA	NA	NA	403.57		0.0	*
3Q19	432.11	7/1/2019	NE	23.32	NA	NA	NA	408.79	401.44 - 385.51 (30.67 - 46.60)	0.0	*
4Q19		10/2/2019	NE	23.37	NA	NA	NA	408.74		0.0	*
P-120											
1Q17	432.82	1/17/2017	NE	27.37	NA	NA	NA	405.45	401.44 - 385.51 (31.38 - 47.31)	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		1/3/2018	NE	28.69	NA	NA	NA	404.13		0.0	*
2Q18		4/4/2018	NE	29.48	NA	NA	NA	403.34		0.0	*
3Q18		7/2/2018	NE	29.04	NA	NA	NA	403.78		0.0	*
4Q18		10/2/2018	NE	28.90	NA	NA	NA	403.92		0.0	*
1Q19		1/3/2019	NE	28.65	NA	NA	NA	404.17		0.3	*
2Q19		4/2/2019	NE	27.96	NA	NA	NA	404.86		0.0	*
3Q19	433.00	7/1/2019	NE	22.74	NA	NA	NA	410.26	401.62 - 385.69 (31.38 - 47.31)	0.0	*
4Q19		10/2/2019	NE	23.40	NA	NA	NA	409.60		0.0	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-129											
1Q17	432.43	1/17/2017	NE	30.09	NA	NA	NA	402.34	400.46 - 384.53 (31.97 - 47.9)	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		1/3/2018	NE	31.67	NA	NA	NA	400.76		0.0	*
2Q18		4/4/2018	NE	31.58	NA	NA	NA	400.85		0.0	*
3Q18		7/3/2018	NE	29.91	NA	NA	NA	402.52		0.0	*
4Q18		10/2/2018	NE	29.62	NA	NA	NA	402.81		0.0	*
1Q19		1/3/2019	NE	29.58	NA	NA	NA	402.85		0.1	*
2Q19		4/2/2019	NE	26.90	NA	NA	NA	405.53		0.0	*
3Q19	432.66	7/8/2019	NE	19.55	NA	NA	NA	413.11	400.69 - 384.76 (31.97 - 47.90)	0.0	*
4Q19		10/2/2019	NE	23.75	NA	NA	NA	408.91		0.0	*
ROST-3-MW											
1Q17	442.29	1/11/2017	NE	37.67	NA	NA	NA	404.62	404.48 - 394.48 (37.81 - 47.81)	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		1/3/2018	NE	38.80	NA	NA	NA	403.49		296	
2Q18		4/2/2018	NE	39.89	NA	NA	NA	402.40		1.3	
3Q18		7/2/2018	NE	40.72	NA	NA	NA	401.57		0.0	
4Q18		10/1/2018	NE	40.78	NA	NA	NA	401.51		0.0	
1Q19		1/3/2019	NE	40.61	NA	NA	NA	401.68		0.0	
2Q19		4/1/2019	NE	40.68	NA	NA	NA	401.61		0.0	
3Q19	442.52	7/1/2019	NE	36.84	NA	NA	NA	405.68	404.71 - 394.71 (37.81 - 47.81)	134	*
4Q19		10/1/2019	NE	35.46	NA	NA	NA	407.06		50.1	*
ROST-4-PZ											
1Q17	442.13	1/16/2017	NE	36.96	NA	NA	NA	405.17	407.20 - 397.20 (34.93 - 44.93)	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		1/2/2018	NE	37.88	NA	NA	NA	404.25		60.7	
2Q18		4/2/2018	NE	39.15	NA	NA	NA	402.98		0.0	
3Q18		7/2/2018	NE	39.77	NA	NA	NA	402.36		0.0	
4Q18		10/1/2018	NE	39.81	NA	NA	NA	402.32		0.0	
1Q19		1/2/2019	NE	39.72	NA	NA	NA	402.41		0.0	
2Q19		4/1/2019	NE	40.00	NA	NA	NA	402.13		0.0	
3Q19	442.15	7/1/2019	NE	37.35	NA	NA	NA	404.80	407.22 - 397.22 (34.93 - 44.93)	0.0	
4Q19		10/1/2019	NE	35.10	NA	NA	NA	407.05		31.4	
ROST-4-PZ(A)											
1Q17	442.11	1/16/2017	NE	36.23	NA	NA	NA	405.88	407.34 - 397.34 (34.77 - 44.77)	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		1/2/2018	NE	37.16	NA	NA	NA	404.95		1.3	
2Q18		4/2/2018	NE	38.53	NA	NA	NA	403.58		0.0	
3Q18		7/2/2018	NE	39.59	NA	NA	NA	402.52		0.0	
4Q18		10/2/2018	NE	39.67	NA	NA	NA	402.44		0.0	
1Q19		1/2/2019	NE	39.53	NA	NA	NA	402.58		0.0	
2Q19		4/1/2019	NE	40.05	NA	NA	NA	402.06		0.0	
3Q19	442.15	7/1/2019	NE	36.34	NA	NA	NA	405.81	407.38 - 397.38 (34.77 - 44.77)	0.0	
4Q19		10/1/2019	NE	34.38	NA	NA	NA	407.77		6.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
ROST-4-PZ(B)											
1Q17	442.38	1/16/2017	NE	36.96	NA	NA	NA	405.42	407.33 - 397.33 (35.05 - 45.05)	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		1/2/2018	NE	37.85	NA	NA	NA	404.53		0.9	
2Q18		4/2/2018	NE	39.30	NA	NA	NA	403.08		0.0	
3Q18		7/2/2018	NE	40.02	NA	NA	NA	402.36		0.0	
4Q18		10/1/2018	NE	39.82	NA	NA	NA	402.56		0.0	
1Q19		1/2/2019	NE	39.86	NA	NA	NA	402.52		0.0	
2Q19		4/1/2019	NE	40.18	NA	NA	NA	402.20		0.0	
3Q19	442.40	7/1/2019	NE	37.26	NA	NA	NA	405.14	407.35 - 397.35 (35.05 - 45.05)	0.0	
4Q19		10/1/2019	NE	35.09	NA	NA	NA	407.31		0.0	
ROST-4-PZ(C)											
1Q17	442.66	1/16/2017	NE	37.88	NA	NA	NA	404.78	407.71 - 397.71 (34.95 - 44.95)	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		1/2/2018	NE	38.75	NA	NA	NA	403.91		30.9	
2Q18		4/2/2018	NE	39.98	NA	NA	NA	402.68		0.0	
3Q18		7/2/2018	NE	40.88	NA	NA	NA	401.78		0.0	
4Q18		10/1/2018	NE	40.93	NA	NA	NA	401.73		0.0	
1Q19		1/3/2019	NE	40.78	NA	NA	NA	401.88		0.0	
2Q19		4/1/2019	NE	41.04	NA	NA	NA	401.62		0.0	
3Q19	442.97	7/1/2019	NE	38.14	NA	NA	NA	404.83	408.02 - 398.02 (34.95 - 44.95)	0.0	
4Q19		10/1/2019	NE	35.92	NA	NA	NA	407.05		0.0	
ROST-4-PZ(D)											
1Q17	442.98	1/16/2017	NE	37.68	NA	NA	NA	405.30	408.01 - 398.01 (34.97 - 44.97)	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		1/2/2018	NE	38.63	NA	NA	NA	404.35		0.0	
2Q18		4/2/2018	NE	39.82	NA	NA	NA	403.16		0.0	
3Q18		7/2/2018	NE	40.77	NA	NA	NA	402.21		0.0	
4Q18		10/1/2018	NE	40.23	NA	NA	NA	402.75		0.0	
1Q19		1/3/2019	NE	40.65	NA	NA	NA	402.33		0.0	
2Q19		4/1/2019	NE	40.88	NA	NA	NA	402.10		0.0	
3Q19	442.92	7/1/2019	NE	37.98	NA	NA	NA	404.94	407.95 - 397.95 (34.97 - 44.97)	0.0	
4Q19		10/1/2019	NE	35.80	NA	NA	NA	407.12		2.0	
ROST-4-PZ(E)											
1Q17	441.96	1/16/2017	NE	36.94	NA	NA	NA	405.02	407.21 - 397.21 (34.75 - 44.75)	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		1/2/2018	NE	37.85	NA	NA	NA	404.11		11.1	
2Q18		4/3/2018	NE	38.78	NA	NA	NA	403.18		0.0	
3Q18		7/2/2018	NE	39.54	NA	NA	NA	402.42		0.0	
4Q18		10/1/2018	NE	39.59	NA	NA	NA	402.37		0.0	
1Q19		1/2/2019	NE	39.48	NA	NA	NA	402.48		0.0	
2Q19		4/1/2019	NE	39.72	NA	NA	NA	402.24		0.0	
3Q19	441.98	7/1/2019	NE	37.18	NA	NA	NA	404.80	407.23 - 397.23 (34.75 - 44.75)	0.0	
4Q19		10/1/2019	NE	35.09	NA	NA	NA	406.89		35.5	

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
ROST-4-PZ(F)											
1Q17	442.12	1/16/2017	NE	37.20	NA	NA	NA	404.92	407.59 - 397.59 (34.53 - 44.53)	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		1/2/2018	NE	38.07	NA	NA	NA	404.05		0.7	
2Q18		4/3/2018	NE	38.97	NA	NA	NA	403.15		0.0	
3Q18		7/2/2018	NE	39.57	NA	NA	NA	402.55		0.0	
4Q18		10/1/2018	NE	39.59	NA	NA	NA	402.53		0.0	
1Q19		1/2/2019	NE	39.51	NA	NA	NA	402.61		0.0	
2Q19		4/1/2019	NE	39.75	NA	NA	NA	402.37		0.0	
3Q19		7/1/2019	NE	37.32	NA	NA	NA	404.80		0.0	
4Q19		10/1/2019	NE	35.29	NA	NA	NA	406.83		0.0	
ROST-4-PZ(G)											
1Q17	442.13	1/16/2017	NE	37.57	NA	NA	NA	404.56	407.85 - 397.85 (34.28 - 44.28)	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		1/2/2018	NE	38.97	NA	NA	NA	403.16		77.4	
2Q18		4/2/2018	NE	39.84	NA	NA	NA	402.29		0.2	
3Q18		7/2/2018	NE	40.87	NA	NA	NA	401.26		0.0	
4Q18		10/1/2018	NE	40.94	NA	NA	NA	401.19		0.0	
1Q19		1/3/2019	NE	40.74	NA	NA	NA	401.39		0.0	
2Q19		4/1/2019	NE	40.78	NA	NA	NA	401.35		0.0	
3Q19	442.20	7/1/2019	NE	37.00	NA	NA	NA	405.20	407.92 - 397.92 (34.28 - 44.28)	0.0	
4Q19		10/1/2019	NE	35.57	NA	NA	NA	406.63		0.0	
S-1											
1Q17	443.90	1/16/2017	39.30	39.37	404.53	404.60	0.07	404.59	Unknown	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		1/3/2018	40.78	40.85	403.05	403.12	0.07	403.11		185	
2Q18		4/4/2018	42.44	42.50	401.40	401.46	0.06	401.45		191	
3Q18		7/3/2018	42.88	42.95	400.95	401.02	0.07	401.01		168	
4Q18		10/2/2018	42.90	43.02	400.88	401.00	0.12	400.98		176	
1Q19		1/3/2019	43.05	43.08	400.82	400.85	0.03	400.84		212	
2Q19		4/1/2019	42.84	42.85	401.05	401.06	0.01	401.06		572	
3Q19	444.06	7/1/2019	40.03	40.05	404.01	404.03	0.02	404.03		184	
4Q19		10/1/2019	38.32	38.33	405.73	405.74	0.01	405.74		187	
T-1											
1Q17	445.40	1/16/2017	NE	40.05	NA	NA	NA	405.35	398.40 - 388.40 (47.00 - 57.00)	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		1/2/2018	NE	41.16	NA	NA	NA	404.24		8.0	*
2Q18		4/2/2018	NE	42.22	NA	NA	NA	403.18		0.0	*
3Q18		7/2/2018	NE	43.16	NA	NA	NA	402.24		0.0	*
4Q18		10/2/2018	NE	43.33	NA	NA	NA	402.07		0.0	*
1Q19		1/2/2019	NE	43.33	NA	NA	NA	402.07		0.0	*
2Q19		4/1/2019	NE	43.44	NA	NA	NA	401.96		0.0	*
3Q19	445.61	7/1/2019	NE	40.38	NA	NA	NA	405.23	398.61 - 388.61 (47.00 - 57.00)	0.0	*
4Q19		10/1/2019	NE	38.74	NA	NA	NA	406.87		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T-2											
1Q17	443.21	1/16/2017	NE	37.95	NA	NA	NA	405.26	392.72 - 372.56 (50.49 - 70.64)	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		1/2/2018	NE	38.82	NA	NA	NA	404.39		0.0	*
2Q18		4/2/2018	NE	40.07	NA	NA	NA	403.14		0.0	*
3Q18		7/2/2018	NE	41.40	NA	NA	NA	401.81		0.0	*
4Q18		10/1/2018	NE	41.69	NA	NA	NA	401.52		0.0	*
1Q19		1/3/2019	NE	41.83	NA	NA	NA	401.38		0.0	*
2Q19		4/2/2019	NE	41.72	NA	NA	NA	401.49		0.0	*
3Q19	443.40	7/1/2019	NE	39.59	NA	NA	NA	403.81	392.90 - 372.76 (50.49 - 70.64)	0.0	*
4Q19		10/1/2019	NE	37.72	NA	NA	NA	405.68		0.0	*
T-3											
1Q17	449.03	1/17/2017	NE	44.71	NA	NA	NA	404.32	403.81 - 388.81 (45.22 - 60.22)	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		1/2/2018	45.43	45.44	403.59	403.60	0.01	403.60		7.6	
2Q18		4/4/2018	NE	46.94	NA	NA	NA	402.09		0.1	
3Q18		7/2/2018	NE	48.85	NA	NA	NA	400.18		0.0	
4Q18		10/1/2018	NE	49.26	NA	NA	NA	399.77		0.0	
1Q19		1/2/2019	NE	49.53	NA	NA	NA	399.50		4.9	
2Q19		4/2/2019	NE	49.24	NA	NA	NA	399.79		0.0	
3Q19	449.21	7/1/2019	NE	48.00	NA	NA	NA	401.21	403.99 - 388.99 (45.22 - 60.22)	0.0	
4Q19		10/1/2019	NE	45.99	NA	NA	NA	403.22		0.0	
T-4											
1Q17	446.63	1/17/2017	NE	42.50	NA	NA	NA	404.13	398.32 - 383.32 (48.31 - 63.31)	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		0.0	*
1Q18		1/4/2018	NE	43.21	NA	NA	NA	403.42		10.4	*
2Q18		4/4/2018	NE	45.12	NA	NA	NA	401.51		0.0	*
3Q18		7/3/2018	NE	46.96	NA	NA	NA	399.67		0.0	*
4Q18		10/2/2018	NE	47.04	NA	NA	NA	399.59		0.1	*
1Q19		1/2/2019	NE	47.65	NA	NA	NA	398.98		0.0	*
2Q19		4/2/2019	NE	47.14	NA	NA	NA	399.49		0.0	*
3Q19	446.82	7/1/2019	NE	46.87	NA	NA	NA	399.95	396.80 - 381.80 (50.02 - 65.02)	0.0	*
4Q19		10/2/2019	NE	44.83	NA	NA	NA	401.99		0.0	*
T-5											
1Q17	443.47	1/16/2017	NE	38.38	NA	NA	NA	405.09	395.14 - 378.59 (48.33 - 64.88)	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		1/3/2018	NE	39.45	NA	NA	NA	404.02		3.0	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/3/2018	NE	41.59	NA	NA	NA	401.88		2.2	*
4Q18		10/2/2018	NE	41.87	NA	NA	NA	401.60		5.7	*
1Q19		1/3/2019	NE	42.11	NA	NA	NA	401.36		17.7	*
2Q19		4/1/2019	NE	41.84	NA	NA	NA	401.63		4.2	*
3Q19	443.66	7/1/2019	NE	39.64	NA	NA	NA	404.02	395.33 - 378.78 (48.33 - 64.88)	12.0	*
4Q19		10/1/2019	NE	37.75	NA	NA	NA	405.91		5.8	*

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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-6											
1Q17	446.61	1/16/2017	NE	42.50	NA	NA	NA	404.11	394.85 - 380.60 (51.76 - 66.01)	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		0.2	*
1Q18		1/2/2018	NE	44.30	NA	NA	NA	402.31		2.0	*
2Q18		4/3/2018	NE	44.81	NA	NA	NA	401.80		0.7	*
3Q18		7/2/2018	NE	45.61	NA	NA	NA	401.00		0.1	*
4Q18		10/1/2018	NE	45.58	NA	NA	NA	401.03		0.0	*
1Q19		1/2/2019	NE	45.42	NA	NA	NA	401.19		17.1	*
2Q19		4/1/2019	NE	45.24	NA	NA	NA	401.37		0.0	*
3Q19	446.78	7/1/2019	NE	41.12	NA	NA	NA	405.66	394.27 - 380.02 (52.51 - 66.76)	1.8	*
4Q19		10/1/2019	NE	39.90	NA	NA	NA	406.88		0.1	*
T-7											
1Q17	444.04	1/17/2017	NE	38.52	NA	NA	NA	405.52	395.32 - 380.32 (48.72 - 63.72)	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		1/4/2018	39.98	39.99	404.05	404.06	0.01	404.06		2.5	*
2Q18		4/4/2018	NE	41.13	NA	NA	NA	402.91		3.5	*
3Q18		7/2/2018	NE	41.17	NA	NA	NA	402.87		0.0	*
4Q18		10/3/2018	NE	41.08	NA	NA	NA	402.96		0.0	*
1Q19		1/4/2019	NE	40.97	NA	NA	NA	403.07		5.8	*
2Q19		4/2/2019	NE	40.78	NA	NA	NA	403.26		59.6	*
3Q19	444.26	7/2/2019	NE	37.14	NA	NA	NA	407.12	395.54 - 380.54 (48.72 - 63.72)	0.6	*
4Q19		10/2/2019	NE	36.23	NA	NA	NA	408.03		0.9	*
T-12											
1Q17	444.80	1/16/2017	NE	40.70	NA	NA	NA	404.10	397.97 - 371.97 (46.83 - 72.83)	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		1/3/2018	NE	42.06	NA	NA	NA	402.74		6.1	*
2Q18		4/2/2018	NE	43.06	NA	NA	NA	401.74		3.8	*
3Q18		7/2/2018	NE	44.21	NA	NA	NA	400.59		0.1	*
4Q18		10/1/2018	NE	44.18	NA	NA	NA	400.62		1.2	*
1Q19		1/2/2019	NE	44.03	NA	NA	NA	400.77		315	*
2Q19		4/1/2019	NE	44.11	NA	NA	NA	400.69		15.1	*
3Q19	444.99	7/1/2019	NE	40.35	NA	NA	NA	404.64	398.16 - 372.16 (46.83 - 72.83)	1.1	*
4Q19		10/1/2019	NE	38.66	NA	NA	NA	406.33		0.8	*
T-13											
1Q17	443.96	1/16/2017	NE	38.06	NA	NA	NA	405.90	396.46 - 370.46 (47.50 - 73.50)	0.4	*
2Q17		4/3/2017	NE	38.50	NA	NA	NA	405.46		0.0	*
3Q17		7/5/2017	NE	37.10	NA	NA	NA	406.86		0.0	*
4Q17		10/3/2017	NE	37.38	NA	NA	NA	406.58		0.0	*
1Q18		1/2/2018	NE	38.96	NA	NA	NA	405.00		3.7	*
2Q18		4/2/2018	NE	39.93	NA	NA	NA	404.03	400.15 - 374.15 (43.81 - 69.81)	0.0	*
3Q18		7/2/2018	NE	40.85	NA	NA	NA	403.11		0.0	*
4Q18		10/1/2018	NE	41.24	NA	NA	NA	402.72		0.1	*
1Q19		1/2/2019	NE	41.25	NA	NA	NA	402.71		0.0	*
2Q19		4/1/2019	NE	41.34	NA	NA	NA	402.62		0.0	*
3Q19	443.76	7/1/2019	NE	38.35	NA	NA	NA	405.41	399.95 - 373.95 (43.81 - 69.81)	0.0	*
4Q19		10/1/2019	NE	36.78	NA	NA	NA	406.98		0.1	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T-15											
1Q17	445.14	1/16/2017	NE	39.71	NA	NA	NA	405.43	397.10 - 371.10 (48.04 - 74.04)	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		0.0	*
3Q19	445.35	7/1/2019	NE	42.13	NA	NA	NA	403.22	396.95 - 370.95 (48.40 - 74.40)	0.0	*
4Q19		10/1/2019	NE	40.23	NA	NA	NA	405.12		0.0	*
T-17											
1Q17	446.01	1/16/2017	NE	38.11	NA	NA	NA	407.90	401.91 - 375.91 (44.10 - 70.10)	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		0.0	*
3Q19	446.19	7/1/2019	NE	41.39	NA	NA	NA	404.80	401.72 - 375.72 (44.47 - 70.47)	0.0	*
4Q19		10/2/2019	NE	39.98	NA	NA	NA	406.21		0.0	*
T-19											
1Q17	446.79	1/17/2017	NE	42.63	NA	NA	NA	404.16	396.02 - 370.02 (50.77 - 76.77)	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	*
4Q19		10/2/2019	NE	44.74	NA	NA	NA	402.25		5.8	*
T-21											
1Q17	443.99	1/17/2017	NE	29.97	NA	NA	NA	414.02	412.03 - 386.03 (31.96 - 57.96)	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	*
4Q19		10/2/2019	NE	29.31	NA	NA	NA	414.91		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											
1Q17	442.19	1/17/2017	NE	31.82	NA	NA	NA	410.37	410.64 - 384.94 (31.55 - 57.25)	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		1/4/2018	NE	32.91	NA	NA	NA	409.28		1.0	
2Q18		4/4/2018	NE	33.96	NA	NA	NA	408.23		0.0	
3Q18		7/2/2018	NE	33.76	NA	NA	NA	408.43		0.0	
4Q18		10/3/2018	NE	33.96	NA	NA	NA	408.23		0.0	
1Q19		1/4/2019	NE	34.06	NA	NA	NA	408.13		0.0	
2Q19		4/2/2019	NE	33.83	NA	NA	NA	408.36		0.0	
3Q19	442.37	7/2/2019	NE	30.31	NA	NA	NA	412.06	410.82 - 385.12 (31.55 - 57.25)	0.0	*
4Q19		10/2/2019	NE	29.90	NA	NA	NA	412.47		0.0	*
T-23											
1Q17	432.69	1/16/2017	NE	24.61	NA	NA	NA	408.08	405.46 - 379.46 (27.23 - 53.23)	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		1/3/2018	NE	26.07	NA	NA	NA	406.62		0.0	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unable to locate well due to landscaping
3Q18		7/2/2018	NE	26.63	NA	NA	NA	406.06		0.0	*
4Q18		10/3/2018	NE	26.83	NA	NA	NA	405.86		0.0	*
1Q19		1/4/2019	NE	26.65	NA	NA	NA	406.04		0.0	*
2Q19		4/2/2019	NE	26.26	NA	NA	NA	406.43		0.0	*
3Q19	432.90	7/1/2019	NE	22.41	NA	NA	NA	410.49	405.67 - 379.67 (27.23 - 53.23)	0.0	*
4Q19		10/1/2019	NE	22.19	NA	NA	NA	410.71		0.0	*
T-24											
1Q17	443.81	1/16/2017	NE	39.11	NA	NA	NA	404.70	402.31 - 376.66 (41.50 - 67.15)	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		1/2/2018	40.49	40.57	403.24	403.32	0.08	403.30		7.2	*
2Q18		4/2/2018	41.53	41.62	402.19	402.28	0.09	402.26		0.6	
3Q18		7/2/2018	42.79	42.87	400.94	401.02	0.08	401.00		0.4	
4Q18		10/2/2018	42.79	43.08	400.73	401.02	0.29	400.96		0.4	
1Q19		1/3/2019	42.71	43.54	400.27	401.10	0.83	400.93		31.0	
2Q19		4/1/2019	42.69	44.05	399.76	401.12	1.36	400.85		16.0	
3Q19	444.00	7/1/2019	39.75	40.27	403.73	404.25	0.52	404.15	402.50 - 376.85 (41.50 - 67.15)	12.6	*
4Q19		10/1/2019	38.01	38.34	405.66	405.99	0.33	405.92		0.7	*
T-28											
1Q17	444.43	1/16/2017	NE	38.05	NA	NA	NA	406.38	Unknown	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		1/3/2018	NE	38.57	NA	NA	NA	405.86		0.0	
2Q18		4/2/2018	NE	39.84	NA	NA	NA	404.59		0.0	
3Q18		7/2/2018	NE	41.39	NA	NA	NA	403.04		0.0	
4Q18		10/1/2018	NE	41.88	NA	NA	NA	402.55		0.0	
1Q19		1/2/2019	NE	42.55	NA	NA	NA	401.88		0.0	
2Q19		4/2/2019	NE	42.26	NA	NA	NA	402.17		0.0	
3Q19	444.56	7/1/2019	NE	41.35	NA	NA	NA	403.21		0.0	
4Q19		10/2/2019	NE	39.72	NA	NA	NA	404.84		0.0	

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T-37											
1Q17	447.25	1/17/2017	NE	38.58	NA	NA	NA	408.67	398.40 - 378.40 (48.85 - 68.85)	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		1/4/2018	NE	39.08	NA	NA	NA	408.17		0.1	*
2Q18		4/3/2018	NE	40.33	NA	NA	NA	406.92		0.0	*
3Q18		7/3/2018	NE	41.26	NA	NA	NA	405.99		0.0	*
4Q18		10/2/2018	NE	41.59	NA	NA	NA	405.66		0.1	*
1Q19		1/3/2019	NE	42.52	NA	NA	NA	404.73		0.0	*
2Q19		4/2/2019	NE	42.25	NA	NA	NA	405.00		0.0	*
3Q19	447.44	7/2/2019	NE	41.46	NA	NA	NA	405.98	398.58 - 378.58 (48.85 - 68.85)	0.0	*
4Q19		10/2/2019	NE	39.97	NA	NA	NA	407.47		0.0	*
T-38											
1Q17	445.67	1/17/2017	NE	35.86	NA	NA	NA	409.81	396.53 - 376.53 (49.14 - 69.14)	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		1/4/2018	NE	36.13	NA	NA	NA	409.54		22.5	*
2Q18		4/3/2018	NE	37.21	NA	NA	NA	408.46		0.0	*
3Q18		7/3/2018	NE	37.95	NA	NA	NA	407.72		0.0	*
4Q18		10/2/2018	NE	38.32	NA	NA	NA	407.35		0.0	*
1Q19		1/3/2019	NE	39.25	NA	NA	NA	406.42		0.0	*
2Q19		4/2/2019	NE	38.99	NA	NA	NA	406.68		0.0	*
3Q19	445.89	7/2/2019	NE	37.60	NA	NA	NA	408.29	396.75 - 376.75 (49.14 - 69.14)	0.0	*
4Q19		10/2/2019	NE	36.31	NA	NA	NA	409.58		0.0	*
T-62											
1Q17	431.99	1/17/2017	NE	26.70	NA	NA	NA	405.29	412.28 - 382.28 (19.71 - 49.71)	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		1/3/2018	NE	28.34	NA	NA	NA	403.65		0.0	
2Q18		4/4/2018	NE	29.20	NA	NA	NA	402.79		0.0	
3Q18		7/2/2018	NE	28.77	NA	NA	NA	403.22		0.0	
4Q18		10/2/2018	NE	28.78	NA	NA	NA	403.21		0.0	
1Q19		1/3/2019	NE	28.30	NA	NA	NA	403.69		0.1	
2Q19		4/2/2019	NE	27.45	NA	NA	NA	404.54		0.0	
3Q19	432.16	7/30/2019	NE	21.97	NA	NA	NA	410.19	412.45 - 382.45 (19.71 - 49.71)	0.1	
4Q19		10/2/2019	NE	22.97	NA	NA	NA	409.19		0.0	
T-63											
1Q17	431.43	1/17/2017	NE	26.49	NA	NA	NA	404.94	411.45 - 381.45 (19.98 - 49.98)	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		1/3/2018	NE	27.82	NA	NA	NA	403.61		0.0	
2Q18		4/4/2018	NE	28.86	NA	NA	NA	402.57		0.0	
3Q18		7/2/2018	NE	28.83	NA	NA	NA	402.60		0.0	
4Q18		10/2/2018	NE	27.93	NA	NA	NA	403.50		0.0	
1Q19		1/3/2019	NE	27.42	NA	NA	NA	404.01		0.0	
2Q19		4/2/2019	NE	26.69	NA	NA	NA	404.74		0.0	
3Q19	431.55	7/30/2019	NE	20.84	NA	NA	NA	410.71	411.57 - 381.57 (19.98 - 49.98)	0.0	
4Q19		10/2/2019	NE	22.20	NA	NA	NA	409.35		0.0	

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T-64											
1Q17	428.93	1/17/2017	NE	24.91	NA	NA	NA	404.02	409.12 - 379.12 (19.81 - 49.81)	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		1/3/2018	NE	26.04	NA	NA	NA	402.89		0.0	
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/2/2018	NE	25.63	NA	NA	NA	403.30		0.0	
4Q18		10/2/2018	NE	25.47	NA	NA	NA	403.46		0.0	
1Q19		1/4/2019	NE	24.88	NA	NA	NA	404.05		0.0	
2Q19		4/3/2019	NE	23.94	NA	NA	NA	404.99		0.0	
3Q19	429.10	7/30/2019	NE	17.84	NA	NA	NA	411.26	409.29 - 379.29 (19.81 - 49.81)	3.3	*
4Q19		10/2/2019	NE	19.67	NA	NA	NA	409.43		3.4	*

NOTES:

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

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

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

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

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

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

7) The screened interval for certain monitoring wells was adjusted based on an evaluation of the results of annual bottom depth gauging conducted in 1Q18 and 1Q19.

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

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-01							
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	
4Q19	7.02	17.60	0.773	24.65	0.75	9.9	
MW-02							
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	
4Q19	6.94	19.60	1.181	14.70	0.68	120.1	
MW-03							
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	
4Q19	6.92	19.00	1.095	10.66	0.80	-151.9	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-04							
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	
4Q19	6.93	18.50	1.508	8.17	0.68	-115.5	
MW-05							
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	
4Q19	6.85	18.10	1.267	15.60	0.90	-146.5	
MW-06A							
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	
4Q19	6.77	19.90	0.798	37.42	0.69	-121.5	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-06B							
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	
4Q19	7.09	19.90	0.786	0.00	0.62	-111.7	
MW-06C							
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	
4Q19	7.18	19.50	0.783	0.00	0.75	-128.4	
MW-06D							
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	
4Q19	7.13	19.20	0.940	4.45	0.75	-128.9	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-07							
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	
4Q19	6.66	20.40	1.400	24.55	0.48	-75.4	
MW-08							
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	
4Q19	6.93	19.30	1.637	16.41	0.61	-144.9	
MW-09							
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	
4Q19	6.72	17.50	1.600	10.96	0.79	-77.3	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-10							
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	
4Q19	6.93	18.10	1.067	18.33	0.82	-135.6	
MW-11							
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	
4Q19	6.85	17.30	1.288	2.69	0.69	-66.0	
MW-12							
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	
4Q19	6.82	19.40	0.972	5.37	0.65	88.6	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-13							
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	
4Q19	6.59	19.60	1.012	15.84	0.70	-122.6	
MW-14							
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	
4Q19	6.84	17.40	0.875	2.43	1.01	-88.9	
MW-16							
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	
4Q19	6.78	19.10	1.246	46.41	0.82	90.7	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-22							
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.
4Q19	7.10	19.20	1.374	22.53	0.97	-111.6	
MW-23							
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	
4Q19	6.78	19.70	0.787	70.83	0.58	-118.2	
MW-24							
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	
4Q19	6.98	18.20	1.857	19.02	1.07	189.1	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-25							
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	
4Q19	6.91	19.00	1.034	3.91	0.69	-137.5	
MW-26							
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	
4Q19	6.82	18.90	0.965	36.00	0.81	162.6	
MW-27							
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	
4Q19	6.97	19.40	0.835	41.54	4.62	227.4	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-28							
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	
4Q19	6.71	18.90	1.647	5.49	0.50	-19.2	
P-54							
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	
4Q19	6.79	17.30	1.181	2.52	3.36	210.4	
P-55R							
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.
4Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-56							
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	
4Q19	7.15	20.20	1.247	24.17	0.86	-140.0	
P-57							
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	
4Q19	6.89	21.20	0.995	0.00	0.71	-132.0	
P-58							
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	
4Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-59							
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.
4Q19	6.79	24.50	1.168	0.00	0.75	-139.0	
P-66							
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	
4Q19	6.63	19.70	0.998	0.00	0.77	-112.4	
P-68							
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.
4Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-74							
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	
4Q19	6.91	21.80	0.239	3.60	0.80	-84.0	
P-93A							
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	
4Q19	6.62	23.40	0.977	21.33	0.87	-79.3	
P-93B							
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	
4Q19	6.70	19.70	1.073	13.56	1.52	-104.9	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-93C							
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	
4Q19	6.96	21.90	1.099	4.82	0.81	-118.4	
P-93D							
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	
4Q19	7.07	19.10	1.157	24.54	0.88	-121.9	
P-114R							
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	
4Q19	6.73	22.60	0.863	32.44	0.49	-147.9	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
ROST-3-MW							
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	
4Q19	6.47	17.70	1.627	1.15	0.80	-80.4	
ROST-4-PZ(C)							
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	
4Q19	7.00	18.30	1.681	5.87	0.63	-184.6	
ROST-4-PZ(E)							
4Q17	7.02	19.45	1.753	18.10	0.02	-147.0	Added to Interim GW Monitoring Program 4Q17
1Q18	6.99	16.60	2.311	19.70	0.39	-32.4	
2Q18	6.91	18.00	2.416	15.20	0.58	16.8	
3Q18	6.65	23.40	2.660	42.60	2.90	-4.0	
4Q18	6.45	18.70	1.518	11.80	0.89	145.0	
1Q19	6.99	18.40	2.258	35.54	0.41	73.9	
2Q19	6.90	19.10	2.064	26.93	0.42	22.0	
3Q19	6.94	21.10	1.820	24.15	0.28	-80.8	
4Q19	7.00	19.00	2.000	2.33	0.73	-137.2	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
ROST-4-PZ(G)							
4Q17	6.82	18.77	1.525	11.54	0.00	-138.0	Added to Interim GW Monitoring Program 4Q17
1Q18	6.70	18.50	1.416	7.80	0.24	-119.1	
2Q18	6.38	17.90	2.255	10.40	0.37	-88.8	
3Q18	6.76	21.40	2.357	4.90	1.00	-109.7	
4Q18	6.92	18.70	1.832	9.00	0.69	52.1	
1Q19	6.89	17.90	2.222	4.70	0.31	-67.1	
2Q19	7.03	18.70	1.766	5.68	0.13	-42.2	
3Q19	6.60	19.10	1.749	13.86	0.28	-72.8	
4Q19	6.83	20.90	1.721	50.01	0.47	-238.9	
T-12							
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	
4Q19	6.94	22.60	1.427	14.65	0.86	-149.9	

NOTES:

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

2) NM = Not Measured

3) * = Equipment malfunction. Results are suspect.

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

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																					
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-011217	1/12/2017	48.80 - 58.80	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW1-ROX-071119	7/11/2019		38.16	NE	<0.025	0.00044 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-101119	10/11/2019	48.80 - 58.80	35.72	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-02	MW2-ROX-011217	1/12/2017	49.87 - 59.87	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
	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
	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
	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
	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
	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	<0.001	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
	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
	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
	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
	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
	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
	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
	MW2-ROX-070919	7/9/2019		37.86	NE	<0.13	<0.005	<0.005	<0.13	0.011	0.0066	<0.005	<0.005	<0.005	<0.005	0.0068	<0.000031	<0.000021	<0.005	<0.005	<0.005	1.2	<0.005	0.074	<0.13	<0.005	0.064	0.11
	MW2-ROX-101019	10/10/2019	49.87 - 59.87	36.99	NE	<0.13	<0.005	<0.005	<0.13	0.0073	0.0045 J	<0.005	<0.005	<0.005	<0.005	0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.63	<0.005	0.06	<0.13	<0.005	0.065	0.081
MW-03	MW3-ROX-010617	1/6/2017	34.67 - 44.67	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
	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	<0.00031 UJ	<0.00002 UJ	<0.001	<0.001	<0.001	0.0011	<0.001	0.0098	<0.025	0.0035	<0.001	0.02
	MW3-ROX-071217	7/12/2017		24.25	NE	<0.025	0.0004 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0026	<0.025	0.0028	<0.001	0.0078
	MW3-ROX-100517	10/5/2017		25.02	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00063 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.00087 J	<0.025	0.0026	<0.001	0.002
	MW3-ROX-010818	1/8/2018		27.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0046	<0.025	0.0026	<0.001	0.0091
	MW3-ROX-040518	4/5/2018		27.98	NE	0.01 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0028	<0.025	0.0027	<0.001	0.0082
	MW3-ROX-070618	7/6/2018		28.30	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.025	<0.001	<0.001	0.0087
	MW3-ROX-100518	10/5/2018		28.18	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0022	<0.025	0.0019	<0.001	0.0066
	MW3-ROX-010919	1/9/2019		28.05	NE	<0.025 UJ	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.025	<0.001	<0.001	0.0058
	MW3-ROX-040919	4/9/2019		27.50	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW3-ROX-071019	7/10/2019		22.66	NE	<0.025	0.0011	<0.001	<0.025	<0.001	0.001	0.00095 J	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.0037	<0.001	0.013	<0.025	<0.001	<0.001	0.036
	MW3-ROX-101419	10/14/2019	34.67 - 44.67	22.66	NE	<0.025	0.00039 J	<0.001	<0.025	0.0029	<0.001	<0.001	0.00088 J	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0029	<0.001	0.005	<0.025	<0.001	<0.001	0.01
MW-04	MW4-ROX-010917	1/9/2017	45.06 - 55.06	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW4-ROX-070819	7/8/2019		34.47	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0033	<0.001	<0.001
	MW4-ROX-100819	10/8/2019	45.06 - 55.06	34.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																						
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-010617	1/6/2017	33.97 - 43.97	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW5-ROX-071219	7/12/2019		22.37	NE	0.074	0.01	<0.001	<0.025	<0.001	<0.001	0.0023	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0068	<0.001	0.0027	<0.025	0.0028	<0.001	0.0027
	MW5-ROX-101519	10/15/2019	33.97 - 43.97	22.23	NE	<0.025	0.0044	<0.001	<0.025	<0.001	<0.001	0.0026	0.00059 J	<0.001	0.0017	<0.001	<0.000029	<0.000019	<0.001	0.00052 J	<0.001	<0.001	<0.001	0.0023	<0.025	0.0032	<0.001	0.0011
MW-06A	MW6A-ROX-011017	1/10/2017	34.83 - 44.83	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW6A-ROX-071119	7/11/2019		24.57	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6A-ROX-101019	10/10/2019	33.85 - 43.85	24.39	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-06B	MW6B-ROX-011017	1/10/2017	64.05 - 69.05	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW6B-ROX-071119	7/11/2019		24.62	NE	<0.025	0.00044 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-101019	10/10/2019	64.05 - 69.05	24.43	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-06C	MW6C-ROX-011017	1/10/2017	84.95 - 89.95	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW6C-ROX-071119	7/11/2019		24.42	NE	<0.025	0.00075 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-101019	10/10/2019	84.95 - 89.95	24.23	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-101019-DUP	10/10/2019		24.23	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																					
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-011017	1/10/2017	104.72 - 109.72	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW6D-ROX-071119	7/11/2019		24.24	NE	<0.025	0.0056	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-101019	10/10/2019	104.72 - 109.72	24.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-07	MW7-ROX-010917	1/9/2017	42.92 - 52.92	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW7-ROX-070819	7/8/2019		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
	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
	MW7-ROX-100819	10/8/2019	42.92 - 52.92	36.10	NE	<130	1700	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-100819-DUP	10/8/2019		36.10	NE	<130	1600	<5	<130	<5	<5	<5	<5	<5	<5	<5	<0.000029	<0.000019	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
MW-08	MW8-ROX-010917	1/9/2017	33.60 - 43.60	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW8-ROX-070819	7/8/2019		27.15	NE	<13	280	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.00003	<0.00002	<0.5	<0.5	<0.5	0.54	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	MW8-ROX-100819	10/8/2019	33.60 - 43.60	26.91	NE	<13	110	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000029	<0.000019	<0.5	<0.5	<0.5	0.4 J	<0.5	<0.5	<13	<0.5	1.2	<0.5

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
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]
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-011117	1/11/2017	46.45 - 56.45	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW9-ROX-071019	7/10/2019		38.74	NE	<0.025	0.0027 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<0.025	0.00065 J J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-101419	10/14/2019	46.04 - 56.04	38.08	NE	<0.025	0.00082 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-10	MW10-ROX-011117	1/11/2017	44.43 - 54.43	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW10-ROX-071219	7/12/2019		39.33	NE	<0.025	0.00065 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-101419	10/14/2019	44.43 - 54.43	38.40	NE	<0.025 UJ	0.00046 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-11	MW11-ROX-011117	1/11/2017	41.66 - 51.66	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW11-ROX-070919	7/9/2019		35.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-100419	10/4/2019	41.66 - 51.66	35.36	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-12	MW12-ROX-010917	1/9/2017	41.92 - 51.92	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW12-ROX-071019	7/10/2019		35.87	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-100419	10/4/2019	41.92 - 51.92	35.49	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																				
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-010617	1/6/2017	25.57 - 35.57	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
	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
	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
	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
	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
	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
	MW13-ROX-070918	7/9/2018		27.6	NE	0.017 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0044	<0.001	<0.001
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0033	<0.001	<0.001
	MW13-ROX-010719	1/7/2019		27.18	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001 UJ	<0.001	<0.025 UJ	0.0045	<0.001	<0.001
	MW13-ROX-041519	4/15/2019		26.44	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001
	MW13-ROX-070919	7/9/2019		21.59	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001
	MW13-ROX-100919	10/9/2019	24.80 - 34.80	21.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001
MW-14	MW14-ROX-011117	1/11/2017	33.42 - 43.42	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
	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
	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
	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
	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
	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
	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
	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
	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
	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	0.00085 J	<0.025	<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
	MW14-ROX-071019	7/10/2019		26.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-101119	10/11/2019	33.42 - 43.42	26.73	NE	<0.025 UJ	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-16	MW16-ROX-010917	1/9/2017	37.06 - 47.06	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW16-ROX-070919	7/9/2019		37.55	NE	<0.025	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-100719	10/7/2019	37.50 - 47.50	36.86	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-22	MW22-ROX-011217	1/12/2017	37.88 - 47.88	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW22-ROX-101519	10/15/2019	38.43 - 48.43	35.38	NE	0.013 J	0.0035	<0.001	0.0046 J	<0.001	0.0014	0.0012	<0.001	<0.001	<0.001	0.00083 J	<0.000029	<0.00002	<0.001	<0.001	<0.001	0.25	<0.001	0.011	<0.025	<0.001	0.028	0.021 J
	MW22-ROX-101519-DUP	10/15/2019		35.38	NE	0.012 J	0.0039	<0.001	0.0042 J	<0.001	0.0011	0.0009 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.3	<0.001	0.01	<0.025	<0.001	0.032	0.016 J

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
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]
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-011017	1/10/2017	29.02 - 39.02	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
	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
	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
	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
	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
	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
	MW23-ROX-070918	7/9/2018		29.1	NE	0.013 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-100918	10/9/2018		29.00	NE	<0.025	<0.001	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	0.0011	<0.005	<0.001
	MW23-ROX-010919	1/9/2019		28.96	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00088 J	<0.001	<0.001
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.025	<0.001	0.0022 J	0.0086 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-071019	7/10/2019		23.01	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001
	MW23-ROX-100919	10/9/2019	29.02 - 39.02	23.39	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-24	MW24-ROX-010917	1/9/2017	38.89 - 48.89	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW24-ROX-070919	7/9/2019		37.04	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-100719	10/7/2019	39.61 - 49.61	36.56	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-25	MW25-ROX-011117	1/11/2017	35.59 - 45.59	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW25-ROX-070819	7/8/2019		31.52	NE	<0.025	0.016	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001
	MW25-ROX-100819	10/8/2019	35.59 - 45.59	31.18	NE	<0.025	0.044	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001
MW-26	MW26-ROX-010617	1/6/2017	38.15 - 48.15	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
	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
	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
	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
	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
	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
	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
	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	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001
	MW26-ROX-010919	1/9/2019		39.46	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-041019	4/10/2019		38.90	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-071019	7/10/2019		34.54	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-100919	10/9/2019	38.15 - 48.15	33.99	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																						
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-011117	1/11/2017	39.79 - 49.79	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
	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
	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
	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
	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
	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
	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
	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	<0.01	<0.001	<0.01	<0.001	0.00052 J	<0.001
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.025	0.0014	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-041519	4/15/2019		40.99	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-070919	7/9/2019		37.65	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-100319	10/3/2019	39.79 - 49.79	36.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-28	MW28-ROX-011217	1/12/2017	33.61 - 43.61	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	MW28-ROX-071019	7/10/2019		37.14	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0048	<0.001	<0.001
	MW28-ROX-100419	10/4/2019	33.61 - 43.61	35.90	NE	<0.025	0.00047 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.035	<0.001	<0.001
P-54	P54-ROX-010917	1/9/2017	38.00 - 63.00	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P54-ROX-070919	7/9/2019		35.60	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-100419	10/4/2019	38.00 - 63.00	35.22	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
P-56	P56-ROX-011217	1/12/2017	40.82 - 65.82	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P56-ROX-071219	7/12/2019		40.50	NE	0.099	0.0064	<0.001	0.11	0.0024	0.0026	<0.001	0.0009 J	<0.001	<0.001	0.0019	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.18	0.004	0.029	0.018 J	<0.001	0.027	0.039
	P56-ROX-101519	10/15/2019	40.82 - 65.82	39.60	NE	0.021 J	0.0021	<0.001	0.0069 J	0.0036	0.0022	<0.001	0.00095 J	<0.001	0.0029	0.0011	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.021	<0.001	0.019	<0.025	<0.001	0.013	0.024

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
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]
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-011617	1/16/2017	44.19 - 54.19	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
	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
	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
	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
	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
	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
	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
	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
	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
	P57-ROX-101618	10/16/2018		45.86	NE	<5	34	<0.2	<5	<0.2	<0.2	0.1 J	<0.2	<0.2	<0.2	<0.2	<0.000029	<0.000019	<0.2	<0.2	<0.2	0.15 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<5	34	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000029	<0.000019	<0.2	<0.2	<0.2	0.14 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P57-ROX-011419	1/14/2019		45.63	NE	<2.5	28	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.000031	<0.00002	<0.1	<0.1	<0.1	0.18	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<2.5	23	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.000031	<0.00002	<0.1	<0.1	<0.1	0.14	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P57-ROX-041719	4/17/2019		44.89	NE	<1.3	9.8 J	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	0.034 J	<0.05	0.031 J	<1.3	<0.05	<0.05	<0.05
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<1.3	7.4 J	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05
	P57-ROX-071519	7/15/2019		40.82	NE	<0.63	15	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	0.035	<0.025	0.023 J	<0.63	<0.025	0.066	0.038
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	<0.63	16	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	0.036	<0.025	0.024 J	<0.63	<0.025	0.068	0.04
	P57-ROX-101519	10/15/2019	44.19 - 54.19	40.18	NE	<0.5	2.3	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000028	<0.000019	<0.02	<0.02	<0.02	0.012 J	<0.02	0.022	<0.5	<0.02	0.075	0.025
	P57-ROX-101519-DUP	10/15/2019		40.18	NE	<0.5	2.3	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	0.033	<0.5	<0.02	0.067	0.02
P-58	P58-ROX-011617	1/16/2017	40.21 - 65.21	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
	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
	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
	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
	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
	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
	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
	P58-ROX-071519	7/15/2019		38.43	NE	<5	87	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.00003	<0.00002	<0.2	<0.2	<0.2	0.14 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<5	86	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000031	<0.000021	<0.2	<0.2	<0.2	0.13 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
P-59	P59-ROX-011617	1/16/2017	47.91 - 72.91	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P59-ROX-101519	10/15/2019	47.91 - 72.91	40.46	NE	<0.25	2.1	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.00002	<0.01	<0.01	<0.01	0.86	<0.01	0.041	<0.25	<0.01	0.15	0.066
P-66	P66-ROX-011117	1/11/2017	34.72 - 59.72	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P66-ROX-071019	7/10/2019		30.00	NE	<0.025	0.0017	<0.001	<0.025	0.0018	0.0046	0.0038	<0.001	0.00054 J	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0011	<0.001	0.048	<0.025	<0.001	0.12	0.078
	P66-ROX-101119	10/11/2019	34.72 - 59.72	29.52	NE	<0.025	0.00064 J	<0.001	<0.025	0.003	0.0061	0.0041	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.00069 J	<0.001	0.048	<0.025	<0.001	0.087	0.07

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
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]
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-011217	1/12/2017	44.43 - 69.43	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P74-ROX-071219	7/12/2019		37.95	NE	<0.025	0.0045	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-101419	10/14/2019	43.83 - 68.83	36.74	NE	<0.025	0.033	<0.001	<0.025	<0.001	<0.001	<0.001	0.00067 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
P-93A	P93A-ROX-011217	1/12/2017	43.07 - 53.07	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P93A-ROX-071519	7/15/2019		38.92	NE	<0.5 UJ	10	<0.02 UJ	<0.5 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.00003 UJ	<0.00002 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.5 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ
	P93A-ROX-101519	10/15/2019	43.07 - 53.07	38.31	NE	<1.3	220	<0.05	<1.3	<0.05	<0.05	<0.05	0.025 J	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05
P-93B	P93B-ROX-011017	1/10/2017	74.60 - 76.60	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<6.3	220 J	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.000031	<0.00002	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25
	P93B-ROX-101519	10/15/2019	74.78 - 76.78	39.62	NE	<25	170	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-101519-DUP	10/15/2019		39.62	NE	<25	150	<1	<25	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-011117	1/11/2017	92.47 - 97.47	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
	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
	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
	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
	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
	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	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0035	<0.001	<0.001
	P93C-ROX-071218	7/12/2018		45.22	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001
	P93C-ROX-101518	10/15/2018		45.31	NE	<0.25	1.9	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.25	0.0086 J	<0.01	<0.01
	P93C-ROX-011019	1/10/2019		45.01	NE	<0.5	5.8	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<0.02
	P93C-ROX-041819	4/18/2019		44.15	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0013	<0.001	<0.001
	P93C-ROX-071219	7/12/2019		40.18	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0022	<0.001	<0.001
	P93C-ROX-101419	10/14/2019	92.88 - 97.88	39.65	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0008 J	<0.001	<0.001
P-93D	P93D-ROX-011017	1/10/2017	125.75 - 127.75	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P93D-ROX-071219	7/12/2019		40.53	NE	<0.025	0.0012	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001
	P93D-ROX-101519	10/15/2019	125.75 - 127.75	39.88	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00062 J	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001
P-114R	P114R-ROX-010617	1/6/2017	23.01 - 33.01	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	P114R-ROX-070919	7/9/2019		19.48	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0045	<0.001	<0.001
	P114R-ROX-100919	10/9/2019	23.01 - 33.01	20.46	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
ROST-3-MW	ROST3MW-ROX-011117	1/11/2017	37.81 - 47.81	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	ROST3MW-ROX-071119	7/11/2019		36.38	NE	<0.025	0.0081	<0.001	0.0034 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.015	<0.001	0.0021	<0.025	<0.001	0.0045	0.0044
	ROST3MW-ROX-101419	10/14/2019	37.81 - 47.81	35.57	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00062 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																					
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [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]
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-011217	1/12/2017	34.95 - 44.95	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	ROST4PZC-ROX-071219	7/12/2019		37.64	NE	0.38	0.0077	<0.001	<0.025	0.0008 J	<0.001	<0.001	0.00059 J	<0.001	<0.001	0.0008 J	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.12	<0.001	0.0064	<0.025	<0.001	0.092	0.012
	ROST4PZC-ROX-101419	10/14/2019	34.95 - 44.95	35.97	NE	<0.025	0.0047	<0.001	0.014 J	<0.001	0.0012	<0.001	0.00051 J	<0.001	<0.001	0.0011	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.038	<0.001	0.0089	<0.025	<0.001	0.064	0.018
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	<0.00002	<0.005	<0.005	<0.005	0.27	<0.005	0.0084	<0.13	<0.005	0.091	0.017
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	<0.05	0.079	<0.002	0.023 J	0.0017 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.00029	<0.00019	<0.002	<0.002	<0.002	0.043	<0.002	0.0096	<0.05	<0.002	0.098	0.009
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	0.053	0.014	<0.001	0.039	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000041 p	<0.00002	<0.001	<0.001	<0.001	0.0025	<0.001	0.0018	<0.025	<0.001	0.023	0.001
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	<0.025	0.011	<0.001	0.036	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0069	<0.001	0.0023	<0.025	<0.001	0.015	0.0022
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.025 UJ	0.0011	<0.001 UJ	<0.025 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	0.00071 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	<0.001 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
	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
	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
	ROST4PZE-ROX-071219	7/12/2019		NM	NE	0.38	0.11	<0.001	0.0099 J	<0.001	0.00098 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	0.13	<0.001	0.0076	<0.025	<0.001	0.094	0.0091
	ROST4PZE-ROX-101519	10/15/2019	34.75 - 44.75	35.01	NE	<0.025	0.19	<0.001	<0.025	<0.001	0.0019	<0.001	0.00065 J	0.00057 J	<0.001	0.0011	<0.000027	<0.000018	<0.001	<0.001	<0.001	0.52	<0.001	0.017	<0.025	<0.001	0.16	0.025
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
	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
	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
	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
	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
	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
	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
	ROST4PZG-ROX-071219	7/12/2019		36.60	NE	<0.025	<0.001	<0.001	0.005 J	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-100719	10/7/2019	34.28 - 44.28	35.69	NE	<0.025	0.0006 J	<0.001	<0.025	<0.001	<0.001	<0.001	0.0037	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
T-12	T12-ROX-011217	1/12/2017	46.83 - 72.83	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																						
	T12-ROX-071519	7/15/2019		39.74	NE	<0.25	1.7	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.028	<0.01	0.0095 J	<0.25	<0.01	0.033	0.018
	T12-ROX-101519	10/15/2019	46.83 - 72.83	38.40	NE	<0.25	2.6	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.025	<0.01	0.014	<0.25	<0.01	0.043	0.018

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011217	1/12/2017	48.80 - 58.80	38.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW1-ROX-041717	4/17/2017		38.58	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW1-ROX-071117	7/11/2017		37.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW1-ROX-100617	10/6/2017		37.63	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW1-ROX-010518	1/5/2018		40.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW1-ROX-040618	4/6/2018		40.82	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW1-ROX-070618	7/6/2018		41.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011
	MW1-ROX-101018	10/10/2018		41.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW1-ROX-010819	1/8/2019		40.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	0.015	<0.01	<0.01	<0.01
	MW1-ROX-041119	4/11/2019		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW1-ROX-071119	7/11/2019		38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW1-ROX-101119	10/11/2019	48.80 - 58.80	35.72	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097	<0.0097	<0.0097	<0.0097
MW-02	MW2-ROX-011217	1/12/2017	49.87 - 59.87	39.58	NE	<0.001	<0.001	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
	MW2-ROX-041717	4/17/2017		39.69	NE	<0.005	<0.005	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
	MW2-ROX-071217	7/12/2017		38.66	NE	<0.001	<0.001	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
	MW2-ROX-101217	10/12/2017		39.03	NE	<0.005	<0.005	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
	MW2-ROX-011118	1/11/2018		41.24	NE	<0.001	<0.001	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
	MW2-ROX-040918	4/9/2018		42.10	NE	<0.001	<0.001	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
	MW2-ROX-071018	7/10/2018		42.59	NE	<0.001	<0.001	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
	MW2-ROX-101218	10/12/2018		42.71	NE	<0.001	<0.001	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
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	<0.001	<0.001	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
	MW2-ROX-010819	1/8/2019		42.43	NE	<0.002	<0.002	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
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	<0.002	<0.002	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
	MW2-ROX-041619	4/16/2019		41.80	NE	<0.005	<0.005	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
	MW2-ROX-070919	7/9/2019		37.86	NE	<0.005	<0.005	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
	MW2-ROX-101019	10/10/2019	49.87 - 59.87	36.99	NE	<0.005	<0.005	0.0084	<0.005	0.15	0.068	<0.005	0.38	0.035	0.42	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013
MW-03	MW3-ROX-010617	1/6/2017	34.67 - 44.67	25.65	NE	<0.001	<0.001	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
	MW3-ROX-041117	4/11/2017		26.13	NE	<0.001	<0.001	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
	MW3-ROX-071217	7/12/2017		24.25	NE	<0.001	<0.001	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
	MW3-ROX-100517	10/5/2017		25.02	NE	<0.001	<0.001	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
	MW3-ROX-010818	1/8/2018		27.28	NE	<0.001	<0.001	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
	MW3-ROX-040518	4/5/2018		27.98	NE	<0.001	<0.001	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
	MW3-ROX-070618	7/6/2018		28.30	NE	<0.001	<0.001	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
	MW3-ROX-100518	10/5/2018		28.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW3-ROX-010919	1/9/2019		28.05	NE	<0.001	<0.001	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
	MW3-ROX-040919	4/9/2019		27.50	NE	<0.001	<0.001	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
	MW3-ROX-071019	7/10/2019		22.66	NE	<0.001	<0.001	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
	MW3-ROX-101419	10/14/2019	34.67 - 44.67	22.66	NE	<0.001	<0.001	0.0038	<0.001	<0.001	<0.001	<0.001	0.0069	<0.005	0.0073 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ
MW-04	MW4-ROX-010917	1/9/2017	45.06 - 55.06	36.84	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW4-ROX-041017	4/10/2017		37.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	0.000047 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	MW4-ROX-071017	7/10/2017		35.68	NE	<0.001	<0.001	<0.001	<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
	MW4-ROX-100517	10/5/2017		36.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW4-ROX-010918	1/9/2018		38.65	NE	<0.001	<0.001	<0.001	<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
	MW4-ROX-040918	4/9/2018		39.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW4-ROX-071018	7/10/2018		39.60	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0036 U	<0.0098	<0.0098
	MW4-ROX-100818	10/8/2018		39.61	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW4-ROX-010719	1/7/2019		39.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW4-ROX-040819	4/8/2019		38.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW4-ROX-070819	7/8/2019		34.47	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW4-ROX-100819	10/8/2019	45.06 - 55.06	34.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-010617	1/6/2017	33.97 - 43.97	25.33	NE	<0.001	<0.001	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
	MW5-ROX-041217	4/12/2017		25.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW5-ROX-071217	7/12/2017		23.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.01	<0.01	<0.01	<0.01
	MW5-ROX-101217	10/12/2017		25.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096
	MW5-ROX-011118	1/11/2018		26.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW5-ROX-040918	4/9/2018		27.78	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW5-ROX-071018	7/10/2018		27.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.0029 U	<0.011	<0.011
	MW5-ROX-101218	10/12/2018		27.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032 UJ	<0.011 UJ	<0.011	<0.011	<0.011
	MW5-ROX-010819	1/8/2019		27.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW5-ROX-041519	4/15/2019		26.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00075 J	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW5-ROX-071219	7/12/2019		22.37	NE	<0.001	<0.001	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
	MW5-ROX-101519	10/15/2019	33.97 - 43.97	22.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
MW-06A	MW6A-ROX-011017	1/10/2017	34.83 - 44.83	27.43	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6A-ROX-041217	4/12/2017		27.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6A-ROX-071117	7/11/2017		26.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0034 U	<0.01	<0.01
	MW6A-ROX-100417	10/4/2017		27.09	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6A-ROX-010518	1/5/2018		29.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6A-ROX-040518	4/5/2018	33.85 - 43.85	29.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6A-ROX-070518	7/5/2018		30.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.001	<0.001	<0.001	<0.001	<0.031	<0.01	<0.0075 U	<0.01	<0.01
	MW6A-ROX-100418	10/4/2018		30.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	0.000045 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0028 U	<0.0099	<0.0099
	MW6A-ROX-010819	1/8/2019		29.77	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	MW6A-ROX-040519	4/5/2019		29.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW6A-ROX-071119	7/11/2019		24.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01 UJ	<0.01 UJ	<0.01
	MW6A-ROX-101019	10/10/2019	33.85 - 43.85	24.39	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013
MW-06B	MW6B-ROX-011017	1/10/2017	64.05 - 69.05	27.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6B-ROX-041217	4/12/2017		27.75	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6B-ROX-071117	7/11/2017		26.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.01 U	<0.0099	<0.0099
	MW6B-ROX-100417	10/4/2017		27.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6B-ROX-010518	1/5/2018		29.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6B-ROX-040518	4/5/2018		29.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW6B-ROX-070518	7/5/2018		30.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.0044 U	<0.011	<0.011
	MW6B-ROX-100418	10/4/2018		30.13	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0099	<0.01	<0.01
	MW6B-ROX-010819	1/8/2019		29.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW6B-ROX-040519	4/5/2019		29.40	NE	<0.001	<0.001	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
	MW6B-ROX-071119	7/11/2019		24.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01 UJ	<0.01
	MW6B-ROX-101019	10/10/2019	64.05 - 69.05	24.43	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013
MW-06C	MW6C-ROX-011017	1/10/2017	84.95 - 89.95	27.26	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6C-ROX-041217	4/12/2017		27.56	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6C-ROX-071117	7/11/2017		25.99	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6C-ROX-100417	10/4/2017		26.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6C-ROX-040518	4/5/2018		29.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW6C-ROX-070518	7/5/2018		29.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0034 U	<0.01	<0.01
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	MW6C-ROX-100418	10/4/2018		29.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098
	MW6C-ROX-010819	1/8/2019		29.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	MW6C-ROX-040519	4/5/2019		29.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0054 U	<0.01	<0.01
	MW6C-ROX-071119	7/11/2019		24.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	0.0053 J	<0.0099 UJ	<0.0099
	MW6C-ROX-101019	10/10/2019	84.95 - 89.95	24.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	0.015	<0.013	<0.013
	MW6C-ROX-101019-DUP	10/10/2019		24.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011017	1/10/2017	104.72 - 109.72	27.14	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6D-ROX-011017-DUP	1/10/2017		27.14	NE	<0.001	<0.001	<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
	MW6D-ROX-041217	4/12/2017		27.43	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6D-ROX-041217-DUP	4/12/2017		27.43	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6D-ROX-071117	7/11/2017		25.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00016 J	<0.0002	<0.03	<0.0099	<0.0022 U	<0.0099	<0.0099
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW6D-ROX-100517	10/5/2017		26.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01
	MW6D-ROX-010818	1/8/2018		28.90	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW6D-ROX-040518	4/5/2018		29.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW6D-ROX-070518	7/5/2018		29.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	MW6D-ROX-100418	10/4/2018		29.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW6D-ROX-010819	1/8/2019		29.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW6D-ROX-040519	4/5/2019		29.02	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW6D-ROX-071119	7/11/2019		24.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.00003 J	<0.0002	<0.0002	0.000043 J	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01 UJ	<0.01
	MW6D-ROX-101019	10/10/2019	104.72 - 109.72	24.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013
MW-07	MW7-ROX-010917	1/9/2017	42.92 - 52.92	38.90	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW7-ROX-041017	4/10/2017		38.92	NE	<1	<1	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
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<1	<1	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
	MW7 ROX-071117	7/11/2017		37.79	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0077 U	<0.0097	<0.0097
	MW7-ROX-100517	10/5/2017		38.45	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.0067 J	<0.0096	<0.0096
	MW7-ROX-010918	1/9/2018		40.67	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	0.00023	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW7-ROX-040918	4/9/2018		41.38	NE	<1	<1	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
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<1	<1	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
	MW7-ROX-071018	7/10/2018		41.64	NE	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0087 J	<0.0098	<0.0098	<0.0098	<0.0098
	MW7-ROX-100818	10/8/2018		41.69	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW7-ROX-010719	1/7/2019		41.25	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW7-ROX-040819	4/8/2019		40.94	NE	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	0.011 J *	<0.0095	<0.0095	<0.0095	<0.0095
	MW7-ROX-070819	7/8/2019		36.58	NE	<1	<1	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
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<1	<1	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
	MW7-ROX-100819	10/8/2019	42.92 - 52.92	36.10	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096
	MW7-ROX-100819-DUP	10/8/2019		36.10	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0093 J J	<0.0096	0.0049 J J	<0.0096	<0.0096
MW-08	MW8-ROX-010917	1/9/2017	33.60 - 43.60	29.79	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW8-ROX-041017	4/10/2017		30.02	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW8-ROX-071017	7/10/2017		28.48	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	MW8-ROX-100517	10/5/2017		29.28	NE	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.012	<0.0096	<0.0096
	MW8-ROX-010918	1/9/2018		31.60	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000046 J	<0.00019	0.000046 J	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW8-ROX-040918	4/9/2018		32.27	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW8-ROX-071018	7/10/2018		32.42	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.0034 U	<0.011	<0.011
	MW8-ROX-100818	10/8/2018		32.45	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000061 J	0.000046 J	0.000054 J	<0.029	<0.0098	0.0062 J	<0.0098	<0.0098
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	0.00013 J	<0.0002	<0.0002	<0.00098	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW8-ROX-010719	1/7/2019		32.04	NE	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20	0.00017 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW8-ROX-040819	4/8/2019		31.70	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.011 J *	<0.0095	<0.0095	<0.0095	<0.0095
	MW8-ROX-070819	7/8/2019		27.15	NE	<0.5	<0.5	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
	MW8-ROX-100819	10/8/2019	33.60 - 43.60	26.91	NE	<0.5	<0.5	0.29 J	<0.5	<0.5	<0.5	<0.5	<2.5	0.38 J	1 J	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.029 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011117	1/11/2017	46.45 - 56.45	40.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW9-ROX-041417	4/14/2017		40.67	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW9-ROX-071217	7/12/2017		38.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	MW9-ROX-100917	10/9/2017		39.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW9-ROX-011018	1/10/2018		41.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW9-ROX-040618	4/6/2018	46.04 - 56.04	42.29	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW9-ROX-070918	7/9/2018		42.82	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW9-ROX-101018	10/10/2018		42.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW9-ROX-011419	1/14/2019		42.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW9-ROX-041119	4/11/2019		42.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW9-ROX-071019	7/10/2019		38.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0063 U	<0.01	<0.01
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW9-ROX-101419	10/14/2019	46.04 - 56.04	38.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096
MW-10	MW10-ROX-011117	1/11/2017	44.43 - 54.43	39.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-041417	4/14/2017		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-071117	7/11/2017		38.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW10-ROX-100917	10/9/2017		38.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-011018	1/10/2018		40.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-040518	4/5/2018		41.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW10-ROX-070918	7/9/2018		42.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW10-ROX-101018	10/10/2018		42.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.047 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW10-ROX-011119	1/11/2019		43.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-042219	4/22/2019		42.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW10-ROX-071219	7/12/2019		39.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.03 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ
	MW10-ROX-101419	10/14/2019	44.43 - 54.43	38.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
MW-11	MW11-ROX-011117	1/11/2017	41.66 - 51.66	37.63	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW11-ROX-041417	4/14/2017		38.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW11-ROX-071017	7/10/2017		36.39	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.003 J J	<0.01	<0.01
	MW11-ROX-100917	10/9/2017		36.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW11-ROX-011018	1/10/2018		39.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW11-ROX-040618	4/6/2018		39.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098
	MW11-ROX-070918	7/9/2018		40.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011
	MW11-ROX-101118	10/11/2018		40.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098 UJ	0.0086 J	<0.0098	<0.0098
	MW11-ROX-011019	1/10/2019		40.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000038 J	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	MW11-ROX-041119	4/11/2019		40.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW11-ROX-070919	7/9/2019		35.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	0.000054 J	0.000062 J	0.000068 J	0.000051 J	0.00006 J	<0.031	<0.01	<0.01	<0.01	<0.01
	MW11-ROX-100419	10/4/2019	41.66 - 51.66	35.36	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
MW-12	MW12-ROX-010917	1/9/2017	41.92 - 51.92	38.11	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.0028 J	<0.01	<0.01
	MW12-ROX-041417	4/14/2017		38.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW-12-ROX-07072017	7/7/2017		36.84	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW12-ROX-100617	10/6/2017		37.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW12-ROX-011118	1/11/2018		39.62	NE	<0.001	<0.001	<0.001	<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
	MW12-ROX-040518	4/5/2018		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW12-ROX-070618	7/6/2018		41.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021 UJ	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011 UJ	<0.011	<0.011
	MW12-ROX-101018	10/10/2018		40.84	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	0.000031 J	0.000061 J J	0.00011	0.000064 J	0.000039 J	<0.048 UJ	<0.0095	<0.0095	<0.0095
	MW12-ROX-010919	1/9/2019		40.78	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000022 J	0.00024	0.00033	0.00034	0.00037	0.00032	<0.03	<0.01	<0.01	<0.01	<0.01
	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					
	MW12-ROX-040919	4/9/2019		40.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW12-ROX-071019	7/10/2019		35.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00005 J	<0.0002	0.000041 J	<0.03	<0.01	<0.01	<0.01	<0.01
	MW12-ROX-100419	10/4/2019	41.92 - 51.92	35.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0073 U	<0.0096	<0.0096

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs													
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-010617	1/6/2017	25.57 - 35.57	25.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.01	<0.01	<0.01	<0.01
	MW13-ROX-041317	4/13/2017		25.75	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03	<0.01	<0.01	<0.01	<0.01
	MW13-ROX-070717	7/7/2017		23.64	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW13-ROX-101017	10/10/2017		25.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW13-ROX-010918	1/9/2018		27.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW13-ROX-040618	4/6/2018	24.80 - 34.80	27.71	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW13-ROX-070918	7/9/2018		27.6	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0073 U	<0.0098	<0.0098
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW13-ROX-010719	1/7/2019		27.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00028	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	MW13-ROX-041519	4/15/2019		26.44	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW13-ROX-070919	7/9/2019		21.59	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.001	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW13-ROX-100919	10/9/2019	24.80 - 34.80	21.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00064	<0.00019	0.00014 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
MW-14	MW14-ROX-011117	1/11/2017	33.42 - 43.42	29.61	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	0.0039 J	<0.0098	<0.0098
	MW14-ROX-041317	4/13/2017		29.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000025 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	0.0022 J	<0.0099	<0.0099
	MW14-ROX-070717	7/7/2017		28.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW14-ROX-101017	10/10/2017		29.44	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW14-ROX-010918	1/9/2018		31.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.029 UJ	<0.00071	<0.00071	<0.00071	<0.00071
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW14-ROX-041018	4/10/2018		31.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.00005 U	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	MW14-ROX-071118	7/11/2018		32.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW14-ROX-101518	10/15/2018		32.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW14-ROX-010919	1/9/2019		32.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW14-ROX-041619	4/16/2019		31.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW14-ROX-071019	7/10/2019		26.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000048 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0099 H UJ	<0.01	<0.01
	MW14-ROX-101119	10/11/2019	33.42 - 43.42	26.73	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.0056 J	<0.0096	<0.0096
MW-16	MW16-ROX-010917	1/9/2017	37.06 - 47.06	39.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW16-ROX-041417	4/14/2017		39.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW16-ROX-071017	7/10/2017		38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW16-ROX-100617	10/6/2017		38.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW16-ROX-010818	1/8/2018		40.71	NE	<0.001	<0.001	<0.001	<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
	MW16-ROX-040618	4/6/2018	37.50 - 47.50	41.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW16-ROX-070618	7/6/2018		42.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011
	MW16-ROX-100518	10/5/2018		42.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW16-ROX-011119	1/11/2019		42.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW16-ROX-041219	4/12/2019		41.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW16-ROX-070919	7/9/2019		37.55	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.000036 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	MW16-ROX-100719	10/7/2019	37.50 - 47.50	36.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
MW-22	MW22-ROX-011217	1/12/2017	37.88 - 47.88	37.80	NE	<0.005	<0.005	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
	MW22-ROX-011217-DUP	1/12/2017		37.80	NE	<0.005	<0.005	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
	MW22-ROX-041717	4/17/2017		38.24	NE	<0.01	<0.01	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
	MW22-ROX-041717-DUP	4/17/2017		38.24	NE	<0.01	<0.01	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
	MW22-ROX-071217	7/12/2017		36.83	NE	<0.002	<0.002	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
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	<0.002	<0.002	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
	MW22-ROX-101317	10/13/2017		36.94	NE	<0.001	<0.001	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
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	<0.001	<0.001	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
	MW22-ROX-011118	1/11/2018		39.25	NE	<0.025	<0.025	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
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	<0.025	<0.025	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
	MW22-ROX-041018	4/10/2018	38.43 - 48.43	NM	NE	<0.02	<0.02	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
	MW22-ROX-071018	7/10/2018		40.88	NE	<0.025	<0.025	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
	MW22-ROX-101518	10/15/2018		41.11	NE	<0.01	<0.01	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
	MW22-ROX-010919	1/9/2019		40.91	NE	<0.025	<0.025	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
	MW22-ROX-041719	4/17/2019		40.31	NE	<0.025	<0.025	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
	MW22-ROX-101519	10/15/2019	38.43 - 48.43	35.38	NE	<0.001	<0.001	0.0089	<0.001	0.055 J	0.02	<0.001	0.16 J	0.014	0.18 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW22-ROX-101519-DUP	10/15/2019		35.38	NE	<0.001	<0.001	0.0096	<0.001	0.071 J	0.017	<0.001	0.29 J	0.02	0.31 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011017	1/10/2017	29.02 - 39.02	26.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW23-ROX-041117	4/11/2017		27.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW23-ROX-071017	7/10/2017		25.13	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW23-ROX-100517	10/5/2017		26.42	NE	<0.001	<0.001	<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
	MW23-ROX-010518	1/5/2018		28.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.000025 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	MW23-ROX-040918	4/9/2018		29.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW23-ROX-070918	7/9/2018		29.1	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.033	<0.011	<0.011	<0.011	<0.011
	MW23-ROX-100918	10/9/2018		29.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	0.000082 J	0.00004 J	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW23-ROX-010919	1/9/2019		28.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW23-ROX-071019	7/10/2019		23.01	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0095 U	<0.01	<0.01
	MW23-ROX-100919	10/9/2019	29.02 - 39.02	23.39	NE	<0.001	<0.001	<0.0014 U	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.0095
MW-24	MW24-ROX-010917	1/9/2017	38.89 - 48.89	38.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW24-ROX-041717	4/17/2017		39.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW24-ROX-070717	7/7/2017		37.68	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0099	<0.0098	<0.0098
	MW24-ROX-100617	10/6/2017		37.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW24-ROX-010818	1/8/2018		40.36	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW24-ROX-040618	4/6/2018		41.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW24-ROX-070618	7/6/2018		41.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011
	MW24-ROX-100518	10/5/2018	39.61 - 49.61	41.81	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW24-ROX-011019	1/10/2019		41.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW24-ROX-041219	4/12/2019		41.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	MW24-ROX-070919	7/9/2019		37.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01
	MW24-ROX-100719	10/7/2019	39.61 - 49.61	36.56	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
MW-25	MW25-ROX-011117	1/11/2017	35.59 - 45.59	34.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-041117	4/11/2017		34.31	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-071017	7/10/2017		32.75	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-100517	10/5/2017		33.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-010918	1/9/2018		35.80	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	0.000059 J	0.000041 J	<0.0002	<0.0002	<0.029 UJ	<0.01	<0.01	<0.01	<0.01
	MW25-ROX-040918	4/9/2018		36.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	MW25-ROX-071018	7/10/2018		36.71	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01
	MW25-ROX-100818	10/8/2018		36.73	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-040819	4/8/2019		36.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW25-ROX-070819	7/8/2019		31.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011
	MW25-ROX-100819	10/8/2019	35.59 - 45.59	31.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096
MW-26	MW26-ROX-010617	1/6/2017	38.15 - 48.15	36.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW26-ROX-041417	4/14/2017		36.91	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW26-ROX-070717	7/7/2017		35.61	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW26-ROX-100517	10/5/2017		36.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW26-ROX-010818	1/8/2018		38.41	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW26-ROX-040518	4/5/2018		39.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098
	MW26-ROX-070618	7/6/2018		39.73	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011
	MW26-ROX-100918	10/9/2018		39.53	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	0.000023 J	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.047 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW26-ROX-010919	1/9/2019		39.46	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW26-ROX-041019	4/10/2019		38.90	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	0.000043 J	0.00004 J	<0.0002	<0.0002	0.000045 J	<0.03	<0.0099	<0.0099 UJ	<0.0099 UJ	<0.0099
	MW26-ROX-071019	7/10/2019		34.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW26-ROX-100919	10/9/2019	38.15 - 48.15	33.99	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0068 U	<0.0096	<0.0096

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011117	1/11/2017	39.79 - 49.79	38.05	NE	<0.001	<0.001	<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
	MW27-ROX-041417	4/14/2017		38.72	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW27-ROX-071017	7/10/2017		37.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW27-ROX-100917	10/9/2017		37.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW27-ROX-011018	1/10/2018		38.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW27-ROX-040618	4/6/2018		40.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098
	MW27-ROX-070918	7/9/2018		41.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000029 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011
	MW27-ROX-100918	10/9/2018		41.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	0.000028 J	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW27-ROX-041519	4/15/2019		40.99	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW27-ROX-070919	7/9/2019		37.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01
	MW27-ROX-100319	10/3/2019	39.79 - 49.79	36.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
MW-28	MW28-ROX-011217	1/12/2017	33.61 - 43.61	37.14	NE	<0.001	<0.001	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
	MW28-ROX-041717	4/17/2017		38.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0054	0.0063 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW28-ROX-071217	7/12/2017		36.48	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.00092 J	0.0017 J	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW28-ROX-100917	10/9/2017		36.44	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0007 J	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	MW28-ROX-011018	1/10/2018		38.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW28-ROX-040618	4/6/2018		39.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW28-ROX-070918	7/9/2018		40.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.0079 U	<0.011	<0.011
	MW28-ROX-101118	10/11/2018		40.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098 UJ	0.01 F1 J	<0.0098	<0.0098
	MW28-ROX-010819	1/8/2019		40.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	MW28-ROX-040919	4/9/2019		40.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	MW28-ROX-071019	7/10/2019		37.14	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	MW28-ROX-100419	10/4/2019	33.61 - 43.61	35.90	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
P-54	P54-ROX-010917	1/9/2017	38.00 - 63.00	37.80	NE	<0.001	<0.001	<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
	P54-ROX-041717	4/17/2017		38.30	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0027 U	<0.01	<0.01
	P54-ROX-071017	7/10/2017		36.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P54-ROX-100617	10/6/2017		36.79	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01
	P54-ROX-011118	1/11/2018		39.10	NE	<0.001	<0.001	<0.001	<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
	P54-ROX-040618	4/6/2018		40.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00004 J	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	P54-ROX-070618	7/6/2018		40.51	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011
	P54-ROX-100518	10/5/2018		40.46	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098
	P54-ROX-011019	1/10/2019		40.37	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P54-ROX-041119	4/11/2019		39.91	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P54-ROX-070919	7/9/2019		35.60	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0085 U	<0.01	<0.01
	P54-ROX-100419	10/4/2019	38.00 - 63.00	35.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
P-56	P56-ROX-011217	1/12/2017	40.82 - 65.82	42.01	NE	<0.001	<0.001	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
	P56-ROX-040617	4/6/2017		42.46	NE	<0.001	<0.001	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
	P56-ROX-071217	7/12/2017		41.11	NE	<0.001	<0.001	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
	P56-ROX-101117	10/11/2017		41.08	NE	<0.001	<0.001	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
	P56-ROX-011018	1/10/2018		43.63	NE	<0.005	<0.005	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
	P56-ROX-041118	4/11/2018		44.40	NE	<0.001	<0.001	<0.001	<0.001	0.0047	0.0017	<0.001	0.016	<0.005	0.017	0.00015 J	<0.0002	0.000061 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P56-ROX-071118	7/11/2018		45.25	NE	<0.001	<0.001	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
	P56-ROX-101518	10/15/2018		45.37	NE	<0.001	<0.001	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
	P56-ROX-011019	1/10/2019		45.16	NE	<0.001	<0.001	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
	P56-ROX-041719	4/17/2019		44.38	NE	<0.001	<0.001	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
	P56-ROX-071219	7/12/2019		40.50	NE	<0.001	<0.001	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
	P56-ROX-101519	10/15/2019	40.82 - 65.82	39.60	NE	<0.001	<0.001	0.0025	<0.001	0.029	0.0072	<0.001	0.075	0.0029 J	0.078	0.00041	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs													
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011617	1/16/2017	44.19 - 54.19	42.82	NE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P57-ROX-040717	4/7/2017		43.05	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00025 J	<0.001	<0.001	0.00023 J	<0.001	<0.001	<0.001	<0.001	<0.029 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ	<0.0097 UJ
	P57-ROX-071317	7/13/2017		41.95	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00056	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.0099	<0.0041 U	<0.0099	<0.0099
	P57-ROX-101617	10/16/2017		42.64	NE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	0.0005	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	P57-ROX-011818	1/18/2018		44.86	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.00031	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000052 J	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.0005	0.00016 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	P57-ROX-041018	4/10/2018		45.45	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00015 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	P57-ROX-071118	7/11/2018		45.76	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00022	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.0002 J	<0.00022	0.000029 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011
	P57-ROX-101618	10/16/2018		45.86	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00023	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00021	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P57-ROX-011419	1/14/2019		45.63	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.00031 J	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.00038 J	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P57-ROX-041719	4/17/2019		44.89	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00046 J	<0.00098	<0.0002	<0.0002	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	0.0077 J *	<0.0098	<0.0098
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00041 J	<0.00099	<0.0002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	0.0066 J *	<0.0099	<0.0099
	P57-ROX-071519	7/15/2019		40.82	NE	<0.025	<0.025	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
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	<0.025	<0.025	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
	P57-ROX-101519	10/15/2019	44.19 - 54.19	40.18	NE	<0.02	<0.02	0.014 J	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	0.00022	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	0.016
	P57-ROX-101519-DUP	10/15/2019		40.18	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	0.00013 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
P-58	P58-ROX-011617	1/16/2017	40.21 - 65.21	40.73	NE	<1	<1	<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
	P58-ROX-041117	4/11/2017		40.74	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	0.00063 J	0.00017 J	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	P58-ROX-071317	7/13/2017		39.88	NE	<1	<1	<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
	P58-ROX-041118	4/11/2018		43.19	NE	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20	0.00059	0.00027	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20	0.00057	0.00032	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P58-ROX-101618	10/16/2018		43.66	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	0.0006	<0.00019	<0.00019	<0.00019	0.00018 J	0.0001 J	<0.00019	0.000057 J	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P58-ROX-041719	4/17/2019		42.49	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.00099	0.00055 J	0.00049 J	<0.00099	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P58-ROX-071519	7/15/2019		38.43	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	<0.001 UJ	<0.001 UJ	<0.0002 UJ	0.00079 J	0.00073 J	0.0008	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	<0.00019	0.00052	0.0013 J	0.0015 J	0.0014 J	0.0011	0.00084 J J	0.00021	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
P-59	P59-ROX-011617	1/16/2017	47.91 - 72.91	42.83	NE	<0.05	<0.05	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
	P59-ROX-040717	4/7/2017		43.31	NE	<0.05	<0.05	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
	P59-ROX-071317	7/13/2017		42.16	NE	<0.05	<0.05	2.1	<0.05	0.63	0.15	<0.05	3.5	0.13 J	3.6	0.00042 J	<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
	P59-ROX-101317	10/13/2017		41.87	NE	<0.02	<0.02	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
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	<0.02	<0.02	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
	P59-ROX-011118	1/11/2018		44.44	NE	<0.02	<0.02	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
	P59-ROX-041218	4/12/2018		45.13	NE	<0.02	<0.02	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
	P59-ROX-071118	7/11/2018		46.16	NE	<0.025	<0.025	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
	P59-ROX-101618	10/16/2018		45.99	NE	<0.01	<0.01	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
	P59-ROX-011419	1/14/2019		46.10	NE	<0.01	<0.01	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
	P59-ROX-101519	10/15/2019	47.91 - 72.91	40.46	NE	<0.01	<0.01	0.74	<0.01	0.38	0.09	<0.01	1.3	0.17	1.5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
P-66	P66-ROX-011117	1/11/2017	34.72 - 59.72	32.41	NE	<0.001	<0.001	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
	P66-ROX-041317	4/13/2017		32.19	NE	<0.001	<0.001	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
	P66-ROX-071217	7/12/2017		31.38	NE	0.0018	<0.001	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
	P66-ROX-101017	10/10/2017		32.27	NE	<0.001	<0.001	<0.001	<0.001	0.036	0.00066 J	<0.001	0.0027 J	0.0011 J	0.0038 J	0.00036	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P66-ROX-011118	1/11/2018		34.09	NE	<0.001	<0.001	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
	P66-ROX-041018	4/10/2018		34.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0006 J	<0.01	0.00047	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P66-ROX-071118	7/11/2018		35.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00072 J	<0.0019	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.0003 J	<0.002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0067 U	<0.0099	<0.0099
	P66-ROX-101518	10/15/2018		35.31	NE	<0.001 UJ	<0.001 UJ	0.00098 J	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 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
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	<0.001 UJ	<0.001 UJ	0.00099 J	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 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
	P66-ROX-010919	1/9/2019		34.99	NE	<0.001	<0.001	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
	P66-ROX-041619	4/16/2019		34.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00099	<0.00099	<0.0002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P66-ROX-071019	7/10/2019		30.00	NE	<0.001	<0.001	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
	P66-ROX-101119	10/11/2019	34.72 - 59.72	29.52	NE	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.001	<0.005	0.00078 J	<0.01	0.00026 J	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0096	<0.0096	<0.0096	0.017

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011217	1/12/2017	44.43 - 69.43	38.64	NE	<0.001	<0.001	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
	P74-ROX-040717	4/7/2017		38.92	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.031 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ
	P74-ROX-071217	7/12/2017		38.08	NE	<0.001	<0.001	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
	P74-ROX-101617	10/16/2017		38.57	NE	<0.001	<0.001	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
	P74-ROX-011018	1/10/2018		40.25	NE	<0.005	<0.005	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
	P74-ROX-041018	4/10/2018	43.83 - 68.83	40.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.000039 U	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P74-ROX-071118	7/11/2018		42.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P74-ROX-101618	10/16/2018		42.18	NE	<0.001	<0.001	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
	P74-ROX-011019	1/10/2019		42.14	NE	<0.001	<0.001	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
	P74-ROX-041719	4/17/2019		41.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P74-ROX-071219	7/12/2019		37.95	NE	<0.001	<0.001	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
	P74-ROX-101419	10/14/2019	43.83 - 68.83	36.74	NE	<0.001	<0.001	0.0019	<0.001	0.0022	<0.001	<0.001	<0.005	<0.005	0.0019 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095
P-93A	P93A-ROX-011217	1/12/2017	43.07 - 53.07	41.04	NE	<0.005	<0.005	<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
	P93A-ROX-011217-DUP	1/12/2017		41.04	NE	<0.005	<0.005	<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
	P93A-ROX-040717	4/7/2017		41.26	NE	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.02	<0.00019	<0.00019	<0.00019	0.00014 J	0.00012 J	0.00015 J	0.0002	0.00015 J	<0.029 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ
	P93A-ROX-040717-DUP	4/7/2017		41.26	NE	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.02	<0.00021	<0.00021	<0.00021	0.000044 J	<0.00021	0.000053 J	<0.00021	<0.00021	<0.032 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.011 UJ
	P93A-ROX-071317	7/13/2017		40.11	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.056 UJ	<0.019	<0.0094 U	<0.019	<0.019
	P93A-ROX-101117	10/11/2017		40.87	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0043 U	<0.0095	<0.0095
	P93A-ROX-011118	1/11/2018		42.71	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096
	P93A-ROX-041118	4/11/2018		NM	NE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P93A-ROX-052218	5/22/2018		NM	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2													
	P93A-ROX-071218	7/12/2018		44.03	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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
	P93A-ROX-101618	10/16/2018		44.05	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.000086 J	<0.00019	0.000045 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P93A-ROX-011419	1/14/2019		43.78	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.000043 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P93A-ROX-041819	4/18/2019		42.98	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P93A-ROX-071519	7/15/2019		38.92	NE	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 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
	P93A-ROX-101519	10/15/2019		38.31	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.000078 U	<0.000041 U	<0.000039 U	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
P-93B	P93B-ROX-011017	1/10/2017	74.60 - 76.60	42.41	NE	<0.5	<0.5	<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
	P93B-ROX-011017-DUP	1/10/2017		42.41	NE	<0.5	<0.5	<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
	P93B-ROX-040617	4/6/2017		42.59	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	0.0044 J * J	<0.0095	<0.0095
	P93B-ROX-071117	7/11/2017		41.59	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0052 U	<0.0096	<0.0096
	P93B-ROX-101117	10/11/2017		42.21	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	P93B-ROX-011518	1/15/2018		44.42	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095	<0.0095	<0.0095
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P93B-ROX-071218	7/12/2018		45.36	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	0.0026 J	<0.0097	<0.0097
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	0.0027 J	<0.0097	<0.0097
	P93B-ROX-101518	10/15/2018		45.64	NE	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<10 UJ	<10 UJ	<20 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<10 UJ	<10 UJ	<20 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	P93B-ROX-011119	1/11/2019		45.15	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	0.0036 J
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P93B-ROX-071219	7/12/2019		40.35	NE	<0.25	<0.25	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
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<0.25	<0.25	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
	P93B-ROX-101519	10/15/2019		39.62	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	P93B-ROX-101519-DUP	10/15/2019		39.62	NE	<1	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011117	1/11/2017	92.47 - 97.47	42.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0089 J	<0.0098	<0.0098	<0.0098	<0.0098
	P93C-ROX-040517	4/5/2017		42.19	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93C-ROX-071217	7/12/2017		41.30	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.03	<0.0098	0.0042 J	<0.0098	<0.0098
	P93C-ROX-101117	10/11/2017		42.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93C-ROX-011118	1/11/2018		43.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93C-ROX-041118	4/11/2018	92.88 - 97.88	44.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93C-ROX-071218	7/12/2018		45.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01
	P93C-ROX-101518	10/15/2018		45.31	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P93C-ROX-011019	1/10/2019		45.01	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096
	P93C-ROX-041819	4/18/2019		44.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P93C-ROX-071219	7/12/2019		40.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.03 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ
	P93C-ROX-101419	10/14/2019	92.88 - 97.88	39.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096
P-93D	P93D-ROX-011017	1/10/2017	125.75 - 127.75	42.59	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93D-ROX-040617	4/6/2017		42.80	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93D-ROX-071117	7/11/2017		41.64	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93D-ROX-101117	10/11/2017		42.42	NE	<0.001	<0.001	<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
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.001	<0.001	<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
	P93D-ROX-041218	4/12/2018		45.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	0.000046 J	<0.0002	<0.0002	0.00023	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	P93D-ROX-071218	7/12/2018		45.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.032	<0.011	<0.011	<0.011	<0.011
	P93D-ROX-101518	10/15/2018		45.70	NE	<0.001	<0.001	<0.001	<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
	P93D-ROX-011119	1/11/2019		45.31	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P93D-ROX-041819	4/18/2019		44.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098
	P93D-ROX-071219	7/12/2019		40.53	NE	<0.001	<0.001	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
	P93D-ROX-101519	10/15/2019	125.75 - 127.75	39.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
P-114R	P114R-ROX-010617	1/6/2017	23.01 - 33.01	24.81	NE	<0.001	<0.001	<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
	P114R-ROX-041317	4/13/2017		25.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000062 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.0042 J	<0.01	<0.01
	P114R-ROX-071117	7/11/2017		22.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P114R-ROX-101017	10/10/2017		24.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	P114R-ROX-010918	1/9/2018		26.37	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00014 J	<0.00095	0.00025 J	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	P114R-ROX-040618	4/6/2018		26.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P114R-ROX-070918	7/9/2018		26.38	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0054 U	<0.0097	<0.0097
	P114R-ROX-101118	10/11/2018		26.27	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098 UJ	<0.0098	<0.0098	<0.0098
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000055 J	<0.00039	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098 UJ	<0.0098	<0.0098	<0.0098
	P114R-ROX-010719	1/7/2019		25.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.0001 J	<0.00019	0.000045 J	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	P114R-ROX-041519	4/15/2019		24.70	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03	<0.01	<0.01	<0.01	<0.01
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099
	P114R-ROX-070919	7/9/2019		19.48	NE	<0.001	<0.001	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
	P114R-ROX-100919	10/9/2019	23.01 - 33.01	20.46	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	0.000062 J	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097
ROST-3-MW	ROST3MW-ROX-011117	1/11/2017	37.81 - 47.81	37.50	NE	<0.001	<0.001	<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
	ROST3MW-ROX-041417	4/14/2017		38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00027	0.000039 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095
	ROST3MW-ROX-071117	7/11/2017		36.61	NE	<0.001	<0.001	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
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00027	0.000056 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	0.0031 J	<0.0096	<0.0096
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01													
	ROST3MW-ROX-011518	1/15/2018		40.00	NE											0.00024	<0.00019	0.000022 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095
	ROST3MW-ROX-022618	2/26/2018	37.81 - 47.81	40.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01													
	ROST3MW-ROX-040618	4/6/2018		39.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00013 J	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0044 U	<0.01	<0.01
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<0.001	<0.001	<0.001	<0.001	0.00036 J	<0.001	<0.001	<0.002	<0.001	<0.003	0.00041 J	0.000076 J	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00025	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003 J	0.00073 J	0.0037 J	0.00023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0073 J	<0.0098	<0.0098	<0.0098	<0.0098
	ROST3MW-ROX-071119	7/11/2019		36.38	NE	<0.001	<0.001	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
	ROST3MW-ROX-101419	10/14/2019	37.81 - 47.81	35.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000059 J	<0.00019	0.000028 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs										SVOCs													
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	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
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.005 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]
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-011217	1/12/2017	34.95 - 44.95	37.88	NE	<0.001	<0.001	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
	ROST4PZC-ROX-041717	4/17/2017		38.24	NE	<0.002	<0.002	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
	ROST4PZC-ROX-071217	7/12/2017		37.20	NE	<0.001	<0.001	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
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	<0.001	<0.001	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
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<0.001	<0.001	<0.001	<0.001	0.014	<0.001	<0.001	<0.005	<0.005	<0.01	0.00089	0.00016 J	0.0003	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095	<0.0095	<0.0095
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00024	<0.0002	0.0001 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00028	<0.00022	0.000094 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	0.013 B	<0.011	<0.011
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	<0.001	<0.001	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
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	<0.001	<0.001	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
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	<0.001	<0.001	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
	ROST4PZC-ROX-071219	7/12/2019		37.64	NE	<0.001	<0.001	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
	ROST4PZC-ROX-101419	10/14/2019	34.95 - 44.95	35.97	NE	<0.001	<0.001	0.0071	<0.001	0.037	0.0024	<0.001	0.065	0.0041 J	0.069	0.0018	<0.00019	0.00046	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	<0.005	<0.005	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
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	<0.002	<0.002	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
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	<0.001	<0.001	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
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	<0.001	<0.001	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
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	0.0059	0.0018	<0.001 UJ	0.0028 J	0.0014 J	0.0042 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.15	<0.049	<0.049	<0.049	<0.049
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	<0.001	<0.001	<0.001	<0.001	0.0013	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00038	<0.00038	0.0082	<0.00038	0.00011 J	<0.00038 UJ	<0.00038 UJ	<0.00038	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	<0.001	<0.001	0.0011	<0.001	0.0033	<0.001	<0.001	0.006	0.0014 J	0.0074 J	<0.0002	<0.0002	0.00054 J	<0.00098	<0.0002	<0.0002	<0.0002	<0.0002	0.0071 J	<0.0098	0.024 * J	<0.0098	<0.0098
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	<0.001	<0.001	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
	ROST4PZE-ROX-071219	7/12/2019		NM	NE	<0.001	<0.001	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
	ROST4PZE-ROX-101519	10/15/2019	34.75 - 44.75	35.01	NE	<0.001	<0.001	0.058	<0.001	0.22	0.039	<0.001	0.64	0.13	0.77	0.002	<0.00019	0.0011	0.000041 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0095	<0.0095	<0.0095	<0.0095
ROST-4-PZ(G)	ROST4PZG-ROX-101217	10/12/2017	34.28 - 44.28	36.58	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	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
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000019 J	0.000027 J	0.000038 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095	<0.0095	<0.0095
	ROST4PZG-ROX-040918	4/9/2018		40.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000057 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098 UJ	<0.0098
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<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
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.000023 J	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095
	ROST4PZG-ROX-071219	7/12/2019		36.60	NE	<0.001	<0.001	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
	ROST4PZG-ROX-100719	10/7/2019	34.28 - 44.28	35.69	NE	<0.001	<0.001	0.0049	<0.001	<0.001	<0.001	<0.001	<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
T-12	T12-ROX-011217	1/12/2017	46.83 - 72.83	40.70	NE	<0.01	<0.01	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
	T12-ROX-040617	4/6/2017		41.18	NE	<0.01	<0.01	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
	T12-ROX-071317	7/13/2017		40.10	NE	<0.01	<0.01	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
	T12-ROX-101317	10/13/2017		39.48	NE	<0.01	<0.01	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
	T12-ROX-011018	1/10/2018		42.14	NE	<0.01	<0.01	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
	T12-ROX-041218	4/12/2018		43.03	NE	<0.01	<0.01	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
	T12-ROX-071118	7/11/2018		44.12	NE	<0.01	<0.01	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
	T12-ROX-101618	10/16/2018		43.90	NE	<0.01	<0.01	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
	T12-ROX-011019	1/10/2019		44.00	NE	<0.01	<0.01	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
	T12-ROX-041719	4/17/2019		43.38	NE	<0.01	0.013	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
	T12-ROX-041719-PCE	4/17/2019		43.38	NE		<0.005 UJ																					
	T12-ROX-071519	7/15/2019		39.74	NE	<0.01	<0.01	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
	T12-ROX-101519	10/15/2019	46.83 - 72.83	38.40	NE	<0.01	<0.01	0.065	<0.01	0.016	0.008 J	<0.01	0.15	0.01 J	0.16	0.00022	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011217	1/12/2017	48.80 - 58.80	38.35	NE	<0.00019	<0.00019	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW1-ROX-071117	7/11/2017		37.24	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000041 J	0.000063 J	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	<0.0002	<0.01	<0.0002
	MW1-ROX-100617	10/6/2017		37.63	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000024 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW1-ROX-010518	1/5/2018		40.06	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW1-ROX-040618	4/6/2018		40.82	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	0.000021 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW1-ROX-070618	7/6/2018		41.40	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW1-ROX-101018	10/10/2018		41.17	NE	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095	<0.0095	<0.000095	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	<0.000095
	MW1-ROX-010819	1/8/2019		40.96	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	0.0043 J	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	0.00002 J	0.000023 J	<0.01	<0.02	<0.01	<0.01	<0.02	0.000057 J	<0.01	<0.0002
	MW1-ROX-041119	4/11/2019		40.50	NE	<0.00019	<0.00019 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019 UJ	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW1-ROX-071119	7/11/2019		38.16	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW1-ROX-101119	10/11/2019	48.80 - 58.80	35.72	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097 UJ	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097 UJ	<0.019 UJ	<0.0097 UJ	<0.0097 UJ	<0.019 UJ	<0.00019	<0.0097 UJ	<0.00019
MW-02	MW2-ROX-011217	1/12/2017	49.87 - 59.87	39.58	NE	<0.00019	<0.00019	<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	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.012	0.02	<0.01	<0.021	<0.01	<0.01	0.0019 J	<0.00021	<0.01	<0.00021
	MW2-ROX-071217	7/12/2017		38.66	NE	<0.00039	<0.00039	<0.0097	<0.0097	<0.0097	<0.0097	0.00048 J	<0.0097	<0.00039	<0.00039	<0.0097	<0.00039	<0.0097	0.01	0.0057	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00039	<0.0097	<0.00039
	MW2-ROX-101217	10/12/2017		39.03	NE	<0.00095 UJ	<0.00095 UJ	<0.0095	<0.0095	0.0059 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00095 UJ	<0.0095	0.013	0.025	<0.0095	0.0011 J	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00095 UJ
	MW2-ROX-011118	1/11/2018		41.24	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095	<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	<0.0002	<0.0002	<0.01 UJ	<0.01	0.013	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	0.015	0.031	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW2-ROX-071018	7/10/2018		42.59	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	0.000062 J	<0.011	0.0087	0.0069	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW2-ROX-101218	10/12/2018		42.71	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	0.0048	0.003 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097 UJ	0.0051	0.0018 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097 UJ	<0.00019
	MW2-ROX-010819	1/8/2019		42.43	NE	<0.0002	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.0029 J	<0.0002	<0.0002	<0.0099	<0.0002 UJ	<0.0099	0.012	0.017	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	<0.0002	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002 UJ	<0.0099	0.013	0.018	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW2-ROX-041619	4/16/2019		41.80	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.014	0.031	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW2-ROX-070919	7/9/2019		37.86	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.016	0.031	<0.0095	0.0049 J	<0.0095	<0.0095	<0.019	0.000021 J	<0.0095	<0.00019
	MW2-ROX-101019	10/10/2019	49.87 - 59.87	36.99	NE	<0.00025	<0.00025	<0.013	0.00061 J	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	0.011	0.022	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025
MW-03	MW3-ROX-010617	1/6/2017	34.67 - 44.67	25.65	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.00097	0.00057	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW3-ROX-071217	7/12/2017		24.25	NE	<0.0004	<0.0004	<0.0099	<0.0099	<0.0099	<0.0099	0.00055 J	<0.0099	<0.0004	<0.0004	<0.0099	<0.0004	<0.0099	0.00094	0.00067	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0004	<0.0099	<0.0004
	MW3-ROX-100517	10/5/2017		25.02	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	0.00018 J	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	MW3-ROX-010818	1/8/2018		27.28	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.0012	0.00051	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW3-ROX-040518	4/5/2018		27.98	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.00058	0.00024	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW3-ROX-070618	7/6/2018		28.30	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	0.00078	0.00036	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	MW3-ROX-100518	10/5/2018		28.18	NE	<0.0002	0.000062 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	0.000056 J	<0.0098	0.00058	0.000099 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW3-ROX-010919	1/9/2019		28.05	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00039	0.00015 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000034 J
	MW3-ROX-040919	4/9/2019		27.50	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00033	0.0002	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW3-ROX-071019	7/10/2019		22.66	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.01	<0.0002	<0.01	0.0012	0.00062	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW3-ROX-101419	10/14/2019	34.67 - 44.67	22.66	NE	<0.00019	<0.00019	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095 UJ	0.00044	0.000071 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
MW-04	MW4-ROX-010917	1/9/2017	45.06 - 55.06	36.84	NE	<0.00019	<0.00019	<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	<0.0002	0.000051 J	<0.01	<0.01	<0.01	<0.01	<0.01	0.0014 J	0.000036 J	<0.0002	<0.01	0.000041 J	<0.01	0.000088 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000038 J
	MW4-ROX-071017	7/10/2017		35.68	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	0.000095 J	<0.0096	0.00018 J	0.000029 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW4-ROX-100517	10/5/2017		36.32	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000024 J	0.000028 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW4-ROX-010918	1/9/2018		38.65	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00063 U	<0.0095	0.000023 J	<0.00019	<0.0095	0.000062 J	<0.0095	0.000021 J	0.000028 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.000019 J
	MW4-ROX-040918	4/9/2018		39.32	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW4-ROX-071018	7/10/2018		39.60	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000044 J	0.000022 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW4-ROX-100818	10/8/2018		39.61	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000078 J	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW4-ROX-010719	1/7/2019		39.22	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00026	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW4-ROX-040819	4/8/2019		38.97	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.001 U	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000056 J	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW4-ROX-070819	7/8/2019		34.47	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	0.0013 J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000084 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW4-ROX-100819	10/8/2019	45.06 - 55.06	34.07	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000049 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-010617	1/6/2017	33.97 - 43.97	25.33	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW5-ROX-071217	7/12/2017		23.96	NE	<0.0004	<0.0004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0004	<0.0004	<0.01	<0.0004	<0.01	0.00013 J	<0.0004	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.0004
	MW5-ROX-101217	10/12/2017		25.04	NE	<0.00096	<0.00096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00096	<0.00019	<0.0096	<0.00096	<0.0096	<0.00096	<0.00096	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00096	<0.0096	<0.00096
	MW5-ROX-011118	1/11/2018		26.98	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	0.000034 J	0.000028 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW5-ROX-040918	4/9/2018		27.78	NE	<0.0002	<0.0002	<0.0099 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW5-ROX-071018	7/10/2018		27.87	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	0.000074 J	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW5-ROX-101218	10/12/2018		27.95	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011 UJ	<0.00022	<0.00022	<0.011	<0.00022	<0.011 UJ	0.000026 J	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011 UJ	<0.00022
	MW5-ROX-010819	1/8/2019		27.65	NE	<0.0002	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002 UJ	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.000056 J	<0.0098	<0.0002
	MW5-ROX-041519	4/15/2019		26.96	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW5-ROX-071219	7/12/2019		22.37	NE	<0.00019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	0.00052 J H J	<0.0096 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.0096 H UJ	0.00062 H J	<0.00019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.00019 H UJ
	MW5-ROX-101519	10/15/2019	33.97 - 43.97	22.23	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000081 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
MW-06A	MW6A-ROX-011017	1/10/2017	34.83 - 44.83	27.43	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW6A-ROX-071117	7/11/2017		26.16	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000023 J	0.000024 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6A-ROX-100417	10/4/2017		27.09	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000026 J	0.000031 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW6A-ROX-010518	1/5/2018		29.22	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6A-ROX-040518	4/5/2018	33.85 - 43.85	29.83	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000052 J
	MW6A-ROX-070518	7/5/2018		30.10	NE	<0.000045 U	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.001	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.000043 U
	MW6A-ROX-100418	10/4/2018		30.10	NE	0.000072 J	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000062 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.00059 UJ	<0.00059 UJ	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000094 J	<0.0099	0.00007 J
	MW6A-ROX-010819	1/8/2019		29.77	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.00016 J
	MW6A-ROX-040519	4/5/2019		29.34	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6A-ROX-071119	7/11/2019		24.57	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.01 UJ	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01 UJ	<0.00021
	MW6A-ROX-101019	10/10/2019	33.85 - 43.85	24.39	NE	<0.00025	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	0.0001 J	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025
MW-06B	MW6B-ROX-011017	1/10/2017	64.05 - 69.05	27.49	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6B-ROX-071117	7/11/2017		26.18	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000037 J	0.000071 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6B-ROX-100417	10/4/2017		27.16	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000026 J	0.000038 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW6B-ROX-010518	1/5/2018		29.25	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000028 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6B-ROX-040518	4/5/2018		29.95	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6B-ROX-070518	7/5/2018		30.15	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW6B-ROX-100418	10/4/2018		30.13	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6B-ROX-010819	1/8/2019		29.83	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6B-ROX-040519	4/5/2019		29.40	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	0.00044 J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6B-ROX-071119	7/11/2019		24.62	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01 UJ	<0.00021
	MW6B-ROX-101019	10/10/2019	64.05 - 69.05	24.43	NE	<0.00025	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025
MW-06C	MW6C-ROX-011017	1/10/2017	84.95 - 89.95	27.26	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6C-ROX-071117	7/11/2017		25.99	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000034 J	0.000056 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW6C-ROX-100417	10/4/2017		26.98	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.000059 U	<0.0095	0.000036 J	0.000048 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6C-ROX-040518	4/5/2018		29.74	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6C-ROX-070518	7/5/2018		29.93	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6C-ROX-100418	10/4/2018		29.93	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW6C-ROX-010819	1/8/2019		29.62	NE	<0.00019	<0.00019 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019 UJ	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW6C-ROX-040519	4/5/2019		29.20	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000023 J	0.000035 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6C-ROX-071119	7/11/2019		24.42	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099 UJ	<0.0002
	MW6C-ROX-101019	10/10/2019	84.95 - 89.95	24.23	NE	<0.00025	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025
	MW6C-ROX-101019-DUP	10/10/2019		24.23	NE	<0.00025	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																			
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011017	1/10/2017	104.72 - 109.72	27.14	NE	<0.00019	<0.00019	<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	0.000068 J	0.000086 J	<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	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW6D-ROX-041217-DUP	4/12/2017		27.43	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6D-ROX-071117	7/11/2017		25.83	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	0.000051 J	<0.0099	0.00003 J	0.000034 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000038 J	0.000066 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6D-ROX-100517	10/5/2017		26.83	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.000025 J	0.000033 J	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW6D-ROX-010818	1/8/2018		28.90	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW6D-ROX-040518	4/5/2018		29.52	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6D-ROX-070518	7/5/2018		29.76	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.00002 U	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6D-ROX-100418	10/4/2018		29.76	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000023 J	0.000026 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6D-ROX-010819	1/8/2019		29.45	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW6D-ROX-040519	4/5/2019		29.02	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW6D-ROX-071119	7/11/2019		24.24	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	0.000023 J	<0.0002	<0.01	0.000048 J	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01 UJ	0.000022 J J
	MW6D-ROX-101019	10/10/2019	104.72 - 109.72	24.07	NE	<0.00025	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025
MW-07	MW7-ROX-010917	1/9/2017	42.92 - 52.92	38.90	NE	<0.0002	<0.0002	<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	<0.00019	<0.00019	<0.0097	<0.0097	0.0051 J	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	0.0024 J	0.00004 J	<0.0097	0.0019	0.0027	0.0043 J	0.0056 J	<0.0097	<0.0097	<0.019	<0.00019	0.27	<0.00019
	MW7-ROX-041017-DUP	4/10/2017		38.92	NE	<0.00019	<0.00019	<0.0097	<0.0097	0.005 J	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	0.0022 J	0.000039 J	<0.0097	0.0019	0.0027	0.0045 J	0.0059 J	<0.0097	<0.0097	<0.019	<0.00019	0.31	<0.00019
	MW7 ROX-071117	7/11/2017		37.79	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0019	0.003	0.0035 J	0.0042 J	<0.0097	<0.0097 UJ	<0.019	0.00013 J	0.27	<0.00019
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<0.00019	<0.00019	<0.0097	<0.0097	0.0038 J	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0016	0.0025	0.0034 J	0.0047 J	<0.0097	<0.0097 UJ	<0.019	<0.00019	0.24	<0.00019
	MW7-ROX-100517	10/5/2017		38.45	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0069 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0023 J	<0.00019	<0.0096	0.0088	0.004	<0.0096	0.0042 J	<0.0096	<0.0096	<0.019	<0.00019	0.17	<0.00019
	MW7-ROX-010918	1/9/2018		40.67	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00048 U	<0.0095	<0.00019	0.00013 J	0.0019 J	<0.00019	<0.0095	0.0027	0.0038	0.0031 J	<0.019	<0.0095	<0.0095 UJ	<0.019 UJ	0.00021	0.077	<0.00019
	MW7-ROX-040918	4/9/2018		41.38	NE	<0.0002	<0.0002	<0.0099 UJ	<0.0099	<0.0099 UJ	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	0.0025 J	<0.0002	<0.0099 UJ	0.0018	0.0027	<0.0099 UJ	<0.02 UJ	<0.0099 UJ	<0.0099 UJ	<0.02 UJ	0.000082 J	0.013 J	<0.0002
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	0.0056 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0025 J	<0.0002	<0.01 UJ	0.0023	0.0029	0.003 J	0.0034 J	<0.01	<0.01	<0.02	0.00011 J	0.087 J	<0.0002
	MW7-ROX-071018	7/10/2018		41.64	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.000089 J	0.0018 J	<0.00022	<0.011	0.0021	0.0029	<0.011	0.0026 J	<0.011	<0.011	<0.022	0.00013 J	0.18	<0.00022
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	0.002 J	<0.0002	<0.0098	0.0022	0.0033	<0.0098	0.0028 J	<0.0098	<0.0098	<0.02	0.00015 J	0.18	<0.0002
	MW7-ROX-100818	10/8/2018		41.69	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00021	<0.0098	<0.0002	<0.0098	0.0014	0.0019	<0.0098	0.0022 J	<0.0098	<0.0098	<0.02	0.00029	0.086	0.000058 J
	MW7-ROX-010719	1/7/2019		41.25	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00014 J	0.001 J	<0.00019 UJ	<0.0095	0.0017	0.0024	<0.0095	0.0017 J	<0.0095	<0.0095	<0.019	0.00029	0.061	<0.00019
	MW7-ROX-040819	4/8/2019		40.94	NE	<0.00019	<0.00095 UJ	<0.0095	<0.0095	0.0063 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.00099 J	<0.00095 UJ	<0.0095	0.0018	0.0027	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00021	0.13	<0.00019
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<0.00019	<0.00095 UJ	<0.0095	<0.0095	0.0067 J	<0.0095	<0.001 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00095 UJ	<0.0095	0.0017	0.0026	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00026	0.16	<0.00019
	MW7-ROX-070819	7/8/2019		36.58	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0046 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0034 J	<0.00019	<0.0096	0.0022	0.0035	<0.0096	0.0027 J	<0.0096	<0.0096	<0.019	<0.00019	0.08 J	<0.00019
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0044 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0038 J	<0.00019	<0.0096	0.0027	0.0042	<0.0096	0.0028 J	<0.0096	<0.0096	<0.019	<0.00019	0.049 J	<0.00019
	MW7-ROX-100819	10/8/2019	42.92 - 52.92	36.10	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0045 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0022 J	<0.00019	<0.0096	0.0017 J	0.0026 J	<0.0096	0.0024 J	<0.0096	<0.0096	<0.019	<0.00019	0.14	<0.00019
	MW7-ROX-100819-DUP	10/8/2019		36.10	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00073 J	0.0012 J	<0.0096	0.0012 J	<0.0096	<0.0096	<0.019	<0.00019	0.07	<0.00019
MW-08	MW8-ROX-010917	1/9/2017	33.60 - 43.60	29.79	NE	<0.0002	<0.0002	<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	<0.0002	<0.0002	<0.01	<0.01	0.0061 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0017 J	<0.0002	<0.01	0.0087	0.0036	<0.01	0.0014 J	<0.01	<0.01	0.0021 J	<0.0002	0.22	<0.0002
	MW8-ROX-071017	7/10/2017		28.48	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0067 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0092	0.0052	<0.0096	0.0023 J	<0.0096	<0.0096	0.0018 J	<0.00019	0.14	<0.00019
	MW8-ROX-100517	10/5/2017		29.28	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.0065 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0019 J	<0.00019	<0.0095	0.0086 J	0.004 J	<0.0095	0.0039 J	<0.0095	<0.0095	<0.019	<0.00019	0.16	<0.00019
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.004 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0022 J	0.0031 J	0.0036 J	0.0045 J	<0.0096	<0.0096	<0.019	<0.00019	0.16	<0.00019
	MW8-ROX-010918	1/9/2018		31.60	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0006 U	<0.0095	<0.00019	0.00024	<0.0095	<0.00019	<0.0095	0.01	0.0046	<0.0095	<0.019	<0.0095	<0.0095 UJ	0.002 J H J	0.000085 J	0.043	<0.00019
	MW8-ROX-040918	4/9/2018		32.27	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	0.0093 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0018 J	<0.0002	<0.01 UJ	0.0098	0.0035	<0.01	0.0011 J	<0.01	<0.01	0.0019 J	0.00013 J	0.08	<0.0002
	MW8-ROX-071018	7/10/2018		32.42	NE	<0.00021	<0.00021	<0.011	<0.011	0.0052 J	<0.011	<0.011	<0.011	<0.00021	0.0002 J	0.0028 J	<0.00021	<0.011	0.0074	0.0031	<0.011	<0.021	<0.011	<0.011	<0.021	0.00011 J	0.19	<0.00021
	MW8-ROX-100818	10/8/2018		32.45	NE	<0.0002	0.000075 J	<0.0098	<0.0098	0.0048 J	<0.0098	<0.0098	<0.0098	<0.0002	0.00031	0.0031 J	0.000057 J	<0.0098	0.0057 J	0.0023	<0.0098	<0.02	<0.0098	<0.0098	0.0024 J	0.00013 J	0.085	<0.0002
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<0.00098	<0.0002	<0.0098	<0.0098	0.0046 J	<0.0098	<0.0098	<0.0098	<0.0002	0.00055	0.0027 J	<0.0002	<0.0098	0.0095 J	0.0035	<0.0098	<0.02	<0.0098	<0.0098	0.0023 J	0.00015 J	0.09	<0.00098
	MW8-ROX-010719	1/7/2019		32.04	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	0.0045 J	<0.0095	<0.0095	<0.0095	<0.00019	0.00036	0.0039 J	<0.00019 UJ	<0.0095	0.0072	0.0046	<0.0095	<0.019	<0.0095	<0.0095	0.0023 J	0.00023	0.057	<0.00019
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	0.0039 J	<0.0095	<0.0095	<0.0095	<0.00019	0.00031	0.0038 J	<0.00019 UJ	<0.0095	0.0074	0.0049	<0.0095	<0.019	<0.0095	<0.0095	0.0024 J	<0.00019	0.055	<0.00019
	MW8-ROX-040819	4/8/2019		31.70	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.008 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0044 J	<0.00019	<0.0095	0.0084	0.0045	<0.0095	<0.019	<0.0095	<0.0095	0.0029 J	0.00021	0.092	<0.00019
	MW8-ROX-070819	7/8/2019		27.15	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0034 J	<0.0002	<0.01	0.0083	0.0039	<0.01	0.0014 J	<0.01	<0.01	0.0025 J	<0.0002	0.31	<0.0002
	MW8-ROX-100819	10/8/2019	33.60 - 43.60	26.91	NE	<0.00019 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 UJ	<0.00019 H UJ	<0.00019 H UJ	0.0027 J H J	<0.00019 H UJ	<0.0095 H UJ	0.0082 H J	0.0019 H J	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.00019 H UJ	0.27 H J	<0.00019 H UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																			
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011117	1/11/2017	46.45 - 56.45	40.06	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW9-ROX-071217	7/12/2017		38.86	NE	<0.00038	<0.00038	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00038	<0.00038	<0.0096	<0.00038	<0.0096	<0.00038	<0.00038	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00038	<0.0096	<0.00038
	MW9-ROX-100917	10/9/2017		39.17	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW9-ROX-011018	1/10/2018		41.10	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW9-ROX-040618	4/6/2018	46.04 - 56.04	42.29	NE	<0.0002	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000024 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000034 J
	MW9-ROX-070918	7/9/2018		42.82	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW9-ROX-101018	10/10/2018		42.88	NE	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095	<0.0095	<0.000095	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	<0.000095
	MW9-ROX-011419	1/14/2019		42.97	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01 UJ	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01 UJ	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW9-ROX-041119	4/11/2019		42.54	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW9-ROX-071019	7/10/2019		38.74	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000025 J	0.000026 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW9-ROX-101419	10/14/2019	46.04 - 56.04	38.08	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096 UJ	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
MW-10	MW10-ROX-011117	1/11/2017	44.43 - 54.43	39.88	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-071117	7/11/2017		38.86	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00002 J	0.000021 J	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	<0.0002	<0.01	<0.0002
	MW10-ROX-100917	10/9/2017		38.94	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000022 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J J	0.000027 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-011018	1/10/2018		40.88	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-040518	4/5/2018		41.94	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW10-ROX-070918	7/9/2018		42.88	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW10-ROX-101018	10/10/2018		42.87	NE	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095	<0.0095	<0.000095	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	<0.000095
	MW10-ROX-011119	1/11/2019		43.06	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-042219	4/22/2019		42.54	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000034 J	<0.000055 U	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW10-ROX-071219	7/12/2019		39.33	NE	<0.0002 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.000059 H UJ	<0.0002 H UJ	<0.01 H UJ	0.000048 J H J	<0.01 H UJ	0.000021 J H J	0.000032 J H J	<0.01 H UJ	<0.02 H UJ	<0.01 H UJ	<0.01 H UJ	<0.02 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.000057 H UJ
	MW10-ROX-101419	10/14/2019	44.43 - 54.43	38.40	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095	0.000025 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
MW-11	MW11-ROX-011117	1/11/2017	41.66 - 51.66	37.63	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00051 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00004 J	0.000057 J J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW11-ROX-071017	7/10/2017		36.39	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW11-ROX-100917	10/9/2017		36.32	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW11-ROX-011018	1/10/2018		39.00	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW11-ROX-040618	4/6/2018		39.98	NE	<0.0002	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW11-ROX-070918	7/9/2018		40.54	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	MW11-ROX-101118	10/11/2018		40.65	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002
	MW11-ROX-011019	1/10/2019		40.45	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW11-ROX-041119	4/11/2019		40.03	NE	<0.00019	<0.00019 UJ	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0.00019 UJ	<0.0094	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.0094	<0.019	<0.00019	<0.0094	0.000044 J
	MW11-ROX-070919	7/9/2019		35.95	NE	0.000042 J	0.000053 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	0.000053 J	<0.01	<0.00021	0.000027 J	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW11-ROX-100419	10/4/2019		35.36	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
MW-12	MW12-ROX-010917	1/9/2017	41.92 - 51.92	38.11	NE	<0.0002	<0.0002	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000021 J	<0.0002	<0.01	<0.0002	<0.01	0.000025 J	0.000036 J J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW-12-ROX-07072017	7/7/2017		36.84	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000031 J	0.000045 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW12-ROX-100617	10/6/2017		37.23	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.000024 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW12-ROX-011118	1/11/2018		39.62	NE	<0.00019	<0.00019	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094 UJ	0.00003 J	<0.00019	<0.0094	<0.000063 U	<0.0094 UJ	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.0094	<0.019	<0.00019	<0.0094	0.00002 J
	MW12-ROX-040518	4/5/2018		40.50	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	0.000025 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000031 J
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	0.000023 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000028 J
	MW12-ROX-070618	7/6/2018		41.03	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011 UJ	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	MW12-ROX-101018	10/10/2018		40.84	NE	0.000059 J	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000077 J	<0.000095	<0.0095	0.000066 J	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	0.000071 J
	MW12-ROX-010919	1/9/2019		40.78	NE	0.00025	0.00045	<0.01	<0.01	<0.01	<0.01	<0.00075 UJ	<0.01	0.00014 J	0.000052 J	<0.01	0.00046	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.000021 J	<0.01	0.00016 J
	MW12-ROX-010919-RE	1/9/2019		40.78	NE	<0.0002 H UJ	<0.0002 H UJ							0.00002 J H J	<0.0002 H UJ		<0.0002 H UJ		<0.0002 H UJ	<0.0002 H UJ						<0.0002 H UJ		<0.0002 H UJ
	MW12-ROX-040919	4/9/2019		40.42	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.00004 J	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000022 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.000021 J J
	MW12-ROX-071019	7/10/2019		35.87	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000028 J	<0.0002	<0.01	0.000042 J	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW12-ROX-100419	10/4/2019		35.49	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-010617	1/6/2017	25.57 - 35.57	25.54	NE	<0.0002	<0.0002	<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	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.001	<0.01	<0.02	<0.01	<0.01	<0.02	<0.001	<0.01	<0.001
	MW13-ROX-070717	7/7/2017		23.64	NE	<0.00095	<0.00095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	<0.00095	<0.0095	<0.00095	<0.0095	<0.00095	<0.00095	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00095	<0.0095	<0.00095
	MW13-ROX-101017	10/10/2017		25.20	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW13-ROX-010918	1/9/2018		27.20	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00045 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0096 UJ	<0.019 UJ	<0.00019	<0.0095	<0.00019
	MW13-ROX-040618	4/6/2018	24.80 - 34.80	27.71	NE	<0.0002	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW13-ROX-070918	7/9/2018		27.6	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097 UJ	<0.00019
	MW13-ROX-010719	1/7/2019		27.18	NE	<0.00019	<0.00019 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019 UJ	<0.0096	0.00017 J	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW13-ROX-041519	4/15/2019		26.44	NE	<0.00098	<0.00098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.00098	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.00098
	MW13-ROX-070919	7/9/2019		21.59	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00051	<0.0095	<0.00019	<0.0095	0.00047	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW13-ROX-100919	10/9/2019	24.80 - 34.80	21.95	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00075	<0.0095	<0.00019	<0.0095	0.0021	0.00042	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
MW-14	MW14-ROX-011117	1/11/2017	33.42 - 43.42	29.61	NE	<0.0002	<0.0002	<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	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000026 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW14-ROX-070717	7/7/2017		28.28	NE	<0.00019	0.000042 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000056 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW14-ROX-101017	10/10/2017		29.44	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW14-ROX-010918	1/9/2018		31.34	NE	<0.000014	<0.000014	<0.00071	<0.00071	<0.00071	<0.00071	<0.000034 U	<0.00071	<0.000014	<0.000014	<0.00071	<0.000014	<0.00071	0.0000015 J	<0.000014	<0.00071	<0.0014	<0.00071	<0.0096 UJ	<0.019 UJ	<0.000014	<0.00071	<0.000014
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0007 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0096 UJ	<0.019 UJ	<0.00019	<0.0095	<0.00019
	MW14-ROX-041018	4/10/2018		31.96	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01 UJ	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01 UJ	<0.0002
	MW14-ROX-071118	7/11/2018		32.06	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000032 J J	0.000033 J J	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019
	MW14-ROX-101518	10/15/2018		32.32	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	0.0019 J	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000083 J	0.00012 J	<0.0098	<0.02	<0.0098	<0.0098 UJ	<0.02	<0.0002	<0.0098	<0.0002
	MW14-ROX-010919	1/9/2019		32.04	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000096 J	0.000077 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW14-ROX-041619	4/16/2019		31.06	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000064 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW14-ROX-071019	7/10/2019		26.95	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000059 J	0.00004 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW14-ROX-101119	10/11/2019	33.42 - 43.42	26.73	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
MW-16	MW16-ROX-010917	1/9/2017	37.06 - 47.06	39.15	NE	<0.0002	<0.0002	<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	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW16-ROX-071017	7/10/2017		38.16	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW16-ROX-100617	10/6/2017		38.04	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.0017 J	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.00002 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW16-ROX-010818	1/8/2018		40.71	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000027 J	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.00002 J
	MW16-ROX-040618	4/6/2018	37.50 - 47.50	41.54	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	0.000023 J	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	0.000033 J
	MW16-ROX-070618	7/6/2018		42.35	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	0.000029 J J	<0.011	<0.00022
	MW16-ROX-100518	10/5/2018		42.24	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW16-ROX-011119	1/11/2019		42.10	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW16-ROX-041219	4/12/2019		41.74	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW16-ROX-070919	7/9/2019		37.55	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	0.000053 J	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.00003 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.000029 J	<0.0096	0.000038 J
	MW16-ROX-100719	10/7/2019	37.50 - 47.50	36.86	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097 UJ	<0.00019	<0.0097	<0.00019	0.000023 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00002 U
MW-22	MW22-ROX-011217	1/12/2017	37.88 - 47.88	37.80	NE	<0.00093	<0.00093	<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	<0.001	<0.001	<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	<0.00019	<0.00019	<0.0095	<0.0095	0.0046 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0084 J	<0.00019	<0.0095	0.0072	0.011 J	<0.0095	0.0025 J	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW22-ROX-041717-DUP	4/17/2017		38.24	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0053 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.01	<0.00019	<0.0096	0.0091	0.015 J	<0.0096	0.0023 J	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW22-ROX-071217	7/12/2017		36.83	NE	<0.00041	<0.00041	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00041	<0.00041	0.0047 J	<0.00041	<0.01	0.005	0.0065	<0.01	<0.02	<0.01	<0.01	<0.02	<0.00041	<0.01	<0.00041
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	<0.0004	<0.0004	<0.01	<0.01	0.0069 J	<0.01	<0.01 UJ	<0.01	<0.0004	<0.0004	0.0048 J	<0.0004	<0.01	0.0053	0.0071	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.0004
	MW22-ROX-101317	10/13/2017		36.94	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.0044 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0015 J	<0.00019	0.00066 J	0.0014 J	0.0015 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0045 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0017 J	<0.00019	0.00063 J	0.00092 J	0.0011 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW22-ROX-011118	1/11/2018		39.25	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0049 J	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	0.0097	<0.00019	<0.0096 UJ	0.012 J	0.02 J	<0.0096	0.0043 J	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.0063 J	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	0.013	<0.00019	<0.0095 UJ	0.016 J	0.026 J	<0.0095	0.006 J	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW22-ROX-041018	4/10/2018	38.43 - 48.43	NM	NE	<0.0002 UJ	<0.0002 UJ	<0.0099 UJ	<0.0099 UJ	0.014 J	<0.0099 UJ	<0.0099 UJ	<0.0099 UJ	<0.0002 UJ	<0.0002 UJ	0.02 J	<0.0002 UJ	<0.0099 UJ	0.028 J	0.04 J	<0.0099 UJ	0.011 J J	<0.0099 UJ	<0.0099 UJ	<0.02 UJ	<0.0002 UJ	<0.0099 UJ	<0.0002 UJ
	MW22-ROX-071018	7/10/2018		40.88	NE	<0.00022	<0.00022	<0.011	<0.011	0.014	<0.011	<0.011	<0.011	<0.00022	<0.00022	0.031	<0.00022	<0.011	0.024	0.035	<0.011	0.0099 J	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW22-ROX-101518	10/15/2018		41.11	NE	<0.00021	<0.00021	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.00021	<0.00021	0.019 J	<0.00021	<0.053	0.019	0.028	<0.053	<0.11	<0.053	<0.053 UJ	<0.11	0.00016 J	<0.053	0.000026 J
	MW22-ROX-010919	1/9/2019		40.91	NE	<0.0002	<0.0002	<0.01	<0.01	0.0059 J	<0.01	<0.01	<0.01	<0.0002	0.00012 J	0.013	<0.0002	<0.01	0.015	0.022	<0.01	0.0013 J	<0.01	<0.01	<0.02	0.00012 J	<0.01	<0.0002
	MW22-ROX-041719	4/17/2019		40.31	NE	<0.0002	<0.0002	<0.0099	<0.0099	0.0068 J	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	0.012	<0.0002	<0.0099	0.02	0.027	<0.0099	0.0015 J	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW22-ROX-101519	10/15/2019	38.43 - 48.43	35.38	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0021 J J	<0.00019	<0.0095	0.0022	0.0025	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW22-ROX-101519-DUP	10/15/2019		35.38	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0023 J J	<0.00019	<0.0095	0.0019	0.0021	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011017	1/10/2017	29.02 - 39.02	26.83	NE	<0.00019	<0.00019	<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	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000049 J	0.000049 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW23-ROX-071017	7/10/2017		25.13	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW23-ROX-100517	10/5/2017		26.42	NE	<0.00019 UJ	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019 UJ
	MW23-ROX-010518	1/5/2018		28.52	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0013 J	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.00002 J
	MW23-ROX-040918	4/9/2018		29.24	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW23-ROX-070918	7/9/2018		29.1	NE	<0.0011	<0.0011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.0011	<0.0011	<0.011	<0.0011	<0.011	<0.0011	<0.0011	<0.011	<0.022	<0.011	<0.011	<0.022	<0.0011	<0.011	<0.0011
	MW23-ROX-100918	10/9/2018		29.00	NE	<0.000096	<0.000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000096	0.0001	<0.0095	<0.000096	<0.0095 UJ	0.000055 J	0.000087 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.00018	<0.0095	0.000025 J
	MW23-ROX-010919	1/9/2019		28.96	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000026 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW23-ROX-071019	7/10/2019		23.01	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW23-ROX-100919	10/9/2019	29.02 - 39.02	23.39	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	<0.00019	0.000021 J	<0.0095	<0.019 UJ	<0.0095	<0.0095	<0.019	<0.00019	<0.0095 UJ	<0.00019
MW-24	MW24-ROX-010917	1/9/2017	38.89 - 48.89	38.97	NE	<0.0002	<0.0002	<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	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.00003 J	0.000048 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW24-ROX-070717	7/7/2017		37.68	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	0.000023 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW24-ROX-100617	10/6/2017		37.93	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000022 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW24-ROX-010818	1/8/2018		40.36	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000024 J	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW24-ROX-040618	4/6/2018	39.61 - 49.61	41.28	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000027 J
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW24-ROX-070618	7/6/2018		41.87	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW24-ROX-100518	10/5/2018		41.81	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW24-ROX-011019	1/10/2019		41.76	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW24-ROX-041219	4/12/2019		41.33	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW24-ROX-070919	7/9/2019		37.04	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW24-ROX-100719	10/7/2019	39.61 - 49.61	36.56	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000032 U	<0.00019	<0.0095 UJ	<0.00019	<0.0095	0.00002 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.000034 U
MW-25	MW25-ROX-011117	1/11/2017	35.59 - 45.59	34.00	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00024	0.000033 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.0042 J	<0.00019
	MW25-ROX-071017	7/10/2017		32.75	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000039 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW25-ROX-010918	1/9/2018		35.80	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	0.000067 J	<0.01	<0.0002	<0.0002	<0.01	<0.02 UJ	<0.01	<0.0095 UJ	<0.019 UJ	<0.0002	<0.01	<0.0002
	MW25-ROX-040918	4/9/2018		36.49	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	0.000028 J	0.000033 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW25-ROX-071018	7/10/2018		36.71	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW25-ROX-100818	10/8/2018		36.73	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	0.00092 J	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW25-ROX-040819	4/8/2019		36.03	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0016 U	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW25-ROX-070819	7/8/2019		31.52	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	MW25-ROX-100819	10/8/2019	35.59 - 45.59	31.18	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
MW-26	MW26-ROX-010617	1/6/2017	38.15 - 48.15	36.74	NE	<0.00019	<0.00019	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW26-ROX-070717	7/7/2017		35.61	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	0.000028 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	MW26-ROX-100517	10/5/2017		36.10	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J	0.00003 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW26-ROX-010818	1/8/2018		38.41	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000023 J	<0.00019	<0.0095	<0.00019	<0.0095	0.000024 J	0.000031 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW26-ROX-040518	4/5/2018		39.22	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW26-ROX-070618	7/6/2018		39.73	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	0.000026 J J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW26-ROX-100918	10/9/2018		39.53	NE	<0.000096	<0.000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000096	<0.000096	<0.0095	<0.000096	<0.0095 UJ	0.00003 J	0.000044 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.000048 J	<0.0095	<0.000096
	MW26-ROX-010919	1/9/2019		39.46	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW26-ROX-041019	4/10/2019		38.90	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW26-ROX-071019	7/10/2019		34.54	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW26-ROX-100919	10/9/2019	38.15 - 48.15	33.99	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011117	1/11/2017	39.79 - 49.79	38.05	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000025 J	0.000032 J J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW27-ROX-071017	7/10/2017		37.23	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000029 J	0.000036 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW27-ROX-100917	10/9/2017		37.17	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.000025 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW27-ROX-011018	1/10/2018		38.98	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW27-ROX-040618	4/6/2018		40.34	NE	<0.0002	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	MW27-ROX-070918	7/9/2018		41.16	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.000025 J	<0.011	<0.00022	<0.011	0.000058 J	0.000081 J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	MW27-ROX-100918	10/9/2018		41.06	NE	<0.000096	<0.000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000096	0.000027 J	<0.0095	<0.000096	<0.0095 UJ	0.000025 J	0.000043 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.000058 J	<0.0095	<0.000096
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW27-ROX-041519	4/15/2019		40.99	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW27-ROX-070919	7/9/2019		37.65	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	MW27-ROX-100319	10/3/2019	39.79 - 49.79	36.07	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
MW-28	MW28-ROX-011217	1/12/2017	33.61 - 43.61	37.14	NE	<0.00019	<0.00019	<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	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.00016 J	0.000092 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW28-ROX-071217	7/12/2017		36.48	NE	<0.0004	<0.0004	<0.0099	<0.0099	<0.0099	<0.0099	0.00049 J	<0.0099	<0.0004	<0.0004	<0.0099	<0.0004	<0.0099	<0.0004	<0.0004	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0004	<0.0099	<0.0004
	MW28-ROX-100917	10/9/2017		36.44	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000092 J	0.000053 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	MW28-ROX-011018	1/10/2018		38.18	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000066 J	0.00003 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW28-ROX-040618	4/6/2018		39.25	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW28-ROX-070918	7/9/2018		40.08	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021
	MW28-ROX-101118	10/11/2018		40.25	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	0.000039 J	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002
	MW28-ROX-010819	1/8/2019		40.32	NE	<0.0002	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002 UJ	<0.0099	0.000068 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	MW28-ROX-040919	4/9/2019		40.42	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000053 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	MW28-ROX-071019	7/10/2019		37.14	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000038 J	0.000026 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	MW28-ROX-100419	10/4/2019	33.61 - 43.61	35.90	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
P-54	P54-ROX-010917	1/9/2017	38.00 - 63.00	37.80	NE	<0.0002	<0.0002	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	P54-ROX-071017	7/10/2017		36.35	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000041 J	<0.0002	<0.0099	<0.0002	<0.0099	0.000044 J	0.000055 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000031 J
	P54-ROX-100617	10/6/2017		36.79	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.000046 J	0.000053 J	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	P54-ROX-011118	1/11/2018		39.10	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	0.000034 J	<0.00019	<0.0096	<0.000064 U	<0.0096 UJ	0.00002 J	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	0.000026 J
	P54-ROX-040618	4/6/2018		40.05	NE	<0.0002	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000032 J	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000033 J
	P54-ROX-070618	7/6/2018		40.51	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	0.000041 J J	0.00004 J J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022
	P54-ROX-100518	10/5/2018		40.46	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	0.000022 J	<0.0002	<0.0098	<0.0002	<0.0098	0.000028 J	0.000032 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P54-ROX-011019	1/10/2019		40.37	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P54-ROX-041119	4/11/2019		39.91	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P54-ROX-070919	7/9/2019		35.60	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000022 J	0.000023 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	P54-ROX-100419	10/4/2019	38.00 - 63.00	35.22	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000026 J J	0.000026 J J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
P-56	P56-ROX-011217	1/12/2017	40.82 - 65.82	42.01	NE	<0.00019	<0.00019	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.01	<0.0002	0.000095 J	<0.01	<0.0002	<0.01	0.0037	0.001	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	P56-ROX-071217	7/12/2017		41.11	NE	<0.00041	<0.00041	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00041	<0.00041	<0.01	<0.00041	<0.01	0.014	0.014	<0.01	0.029	<0.01	<0.01	<0.021	0.00074	<0.01	<0.00041
	P56-ROX-101117	10/11/2017		41.08	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	0.0037	<0.0098	0.0011 J	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P56-ROX-011018	1/10/2018		43.63	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.00025	<0.0096	<0.00019	<0.0096	0.022	0.022	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00081	<0.0096	0.000021 J
	P56-ROX-041118	4/11/2018		44.40	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.01	0.0014	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00038	<0.0098	<0.0002
	P56-ROX-071118	7/11/2018		45.25	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.00019 J	<0.011	<0.00022	<0.011	0.02	0.016	<0.011	<0.022	<0.011	<0.011 UJ	<0.022	0.00059	<0.011	<0.00022
	P56-ROX-101518	10/15/2018		45.37	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00019 J	<0.0098	<0.0002	<0.0098	0.024	0.017	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00057	<0.0098	<0.0002
	P56-ROX-011019	1/10/2019		45.16	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00037	<0.0095	<0.00019	<0.0095	0.016	0.0043	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00088	<0.0095	<0.00019
	P56-ROX-041719	4/17/2019		44.38	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00048	<0.0098	<0.0002	<0.0098	0.024	0.0039	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0015	<0.0098	<0.0002
	P56-ROX-071219	7/12/2019		40.50	NE	<0.00099 H UJ	<0.00099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	0.0012 J H J	<0.0099 H UJ	<0.00099 H UJ	0.00061 J H J	<0.0099 H UJ	<0.00099 H UJ	0.032 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
	P56-ROX-101519	10/15/2019	40.82 - 65.82	39.60	NE	<0.00019	<0.00019	0.00057 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.019	0.02	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00098 B	<0.0095	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011617	1/16/2017	44.19 - 54.19	42.82	NE	<0.0002	<0.0002	<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	<0.001	<0.001	<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	<0.0002	<0.0002	<0.0099	<0.0099	0.025	<0.0099	<0.0099	<0.0099	<0.0002	0.00054	<0.0099	<0.0002	<0.0099	0.023	0.03	<0.0099	<0.02	<0.0099	<0.0099	<0.02 UJ	0.00038	0.63	0.000066 J
	P57-ROX-101617	10/16/2017		42.64	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.0039 J	<0.0095	<0.0095	<0.0095	<0.00019	0.00047	0.0013 J	<0.00019	<0.0095	0.023	0.032	<0.0095	<0.019	<0.0095	<0.0095	<0.019 UJ	0.00049	0.093	0.000091 J
	P57-ROX-011818	1/18/2018		44.86	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00049	<0.0095	<0.00019	<0.0095	0.024	0.032 J	<0.0095	<0.019	<0.0095 UJ	<0.0095	<0.019	0.00035	0.12	<0.00019
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	<0.00019	<0.00019	0.00068 J *	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00076	0.0018 J	<0.00019	<0.0095	0.03	0.041 J	<0.0095	<0.019	<0.0095 UJ	<0.0095	<0.019	0.0005	0.14	<0.00019
	P57-ROX-041018	4/10/2018		45.45	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00032	<0.01 UJ	<0.0002	<0.01	0.031	0.039	<0.01	<0.02	<0.01	<0.01	<0.02	0.00041	0.06	<0.0002
	P57-ROX-071118	7/11/2018		45.76	NE	<0.00021	<0.00021	0.00056 J	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	0.00048 J	<0.011	<0.00021	<0.011	0.032	0.042	<0.011	<0.021	<0.011	<0.011 UJ	<0.021	0.00037	0.039	<0.00021
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022 UJ	<0.011	<0.00022	<0.011	0.032	0.043	<0.011	<0.022	<0.011	<0.011 UJ	<0.022	0.00039	0.057	<0.00022
	P57-ROX-101618	10/16/2018		45.86	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.00033	<0.0097	<0.00019	<0.0097	0.021 J	0.027	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00036	0.023	<0.00019
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.00043	<0.0097	<0.00019	<0.0097	0.027 J	0.034	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00059	0.035	<0.00019
	P57-ROX-011419	1/14/2019		45.63	NE	<0.0002	<0.0002	0.0006 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00056	<0.0099	<0.0002	<0.0099	0.021	0.026	<0.0099	<0.02	<0.0099 UJ	<0.0099	<0.02	0.00041	0.053	<0.0002
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00059	<0.0099	<0.0002	<0.0099	0.019	0.024	<0.0099	<0.02	<0.0099 UJ	<0.0099	<0.02	0.00049	0.058	<0.0002
	P57-ROX-041719	4/17/2019		44.89	NE	<0.0002	<0.00098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00071 J	<0.0098	<0.00098	<0.0098	0.022	0.028	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0004	0.078	0.000029 J J
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<0.00099	<0.00099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00061 J	<0.0099	<0.00099	<0.0099	0.021	0.028	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00046	0.081	<0.00099
	P57-ROX-071519	7/15/2019		40.82	NE	<0.00097	<0.00097	0.00059 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	0.00092 J J	<0.0097	<0.00097	<0.0097	0.034	0.045	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00058 J	0.37	<0.00097
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	<0.0002	<0.0002	0.00057 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00052	<0.01	<0.0002	<0.01	0.033	0.047	<0.01	<0.02	<0.01	<0.01	<0.02	0.0005	0.31	<0.0002
	P57-ROX-101519	10/15/2019	44.19 - 54.19	40.18	NE	<0.00019	<0.00019	0.00066 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00037	<0.0095 UJ	<0.00019	<0.0095	0.028	0.03	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00029	0.079 *	<0.00019
	P57-ROX-101519-DUP	10/15/2019		40.18	NE	<0.00019	<0.00019	0.00056 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.00039	<0.0096 UJ	<0.00019	<0.0096	0.024	0.026	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00025	0.071 *	<0.00019
P-58	P58-ROX-011617	1/16/2017	40.21 - 65.21	40.73	NE	<0.00095	<0.00095	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	0.00027 J	<0.00095	0.0013 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	0.0012	<0.0095	<0.00095	<0.0095	0.051	0.053	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0011	0.15	0.00027 J
	P58-ROX-071317	7/13/2017		39.88	NE	<0.00039 UJ	<0.00039 UJ	<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	<0.0002	<0.0002	0.0017 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0016	<0.01	<0.0002	<0.01	0.073	0.079	<0.01	<0.02	<0.01	<0.01	<0.02	0.0019 J	0.33	<0.0002 UJ
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<0.00019	<0.00097	0.0019 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.0017	<0.0097	<0.00097	<0.0097	0.061	0.064	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.0014 J	0.25	<0.00019 UJ
	P58-ROX-101618	10/16/2018		43.66	NE	0.00032	<0.00019	0.0014 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.0011	<0.0097	<0.00019	<0.0097	0.029	0.021	<0.0097	0.001 J	<0.0097	<0.0097 UJ	<0.019	0.0011	0.093	0.00069
	P58-ROX-041719	4/17/2019		42.49	NE	<0.00099	<0.00099	0.0019 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.00026	0.0018	<0.0099	<0.00099	<0.0099	0.036	0.025	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.0015	0.078	0.001
	P58-ROX-071519	7/15/2019		38.43	NE	0.0014 J	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00041	0.0017 J	<0.01	<0.0002	<0.01	0.059 J	0.033 J	<0.01	<0.02	<0.01	<0.01	<0.02	0.0024 J	0.12	0.0015 J
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	0.003 J	<0.00097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	0.00068	0.0046 J	<0.0097	0.00028 J	<0.0097	0.059	0.04	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.0041 J	0.15	0.004 J
P-59	P59-ROX-011617	1/16/2017	47.91 - 72.91	42.83	NE	<0.00099	<0.00099	<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	<0.00095	<0.00095	<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	0.000056 J	<0.0002	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	0.00016 J	<0.0002	0.018	<0.0002	<0.01	0.021	0.034	<0.01	<0.02	<0.01	<0.01	<0.02 UJ	0.00054	0.066	<0.0002
	P59-ROX-101317	10/13/2017		41.87	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00039 UJ	0.0057 J	<0.00019	<0.0097	0.022	0.019 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	<0.0002	<0.00039 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	0.0081 J	<0.00039 UJ	<0.0098	0.024	0.027 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P59-ROX-011118	1/11/2018		44.44	NE	<0.00096	<0.0004 U	<0.0096	<0.0096	0.035	<0.0096	<0.0096	<0.0096 UJ	<0.00096	<0.00096	0.0063 J	<0.00036 U	<0.0096 UJ	0.024	0.035	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.0016	<0.0096	<0.00096
	P59-ROX-041218	4/12/2018		45.13	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00005 J	0.00017 J	0.0048 J J	<0.0002	<0.01	0.02	0.036	<0.01	<0.02	<0.01	<0.01	<0.02	0.00056	0.015	0.0001 J
	P59-ROX-071118	7/11/2018		46.16	NE	0.00021 J	<0.00022	<0.011	<0.011	0.013	<0.011	<0.011	<0.011	0.00021 J	0.00063	0.0066 J	<0.00022	<0.011	0.013	0.023	<0.011	0.0038 J	<0.011	<0.011 UJ	<0.022	0.001	<0.011	0.00027
	P59-ROX-101618	10/16/2018		45.99	NE	0.00063	<0.00019	<0.0097	<0.0097	0.0035 J	<0.0097	0.002 J	<0.0097	0.00031	0.001	0.0092 J	<0.00019	<0.0097	0.021	0.03	<0.0097	0.0038 J	<0.0097	<0.0097 UJ	<0.019	0.0013	0.012	0.00065
	P59-ROX-011419	1/14/2019		46.10	NE	<0.001	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0061	0.0096	<0.01	<0.02	<0.01 UJ	<0.01	<0.02	<0.0002	<0.01	0.00061 J
	P59-ROX-101519	10/15/2019	47.91 - 72.91	40.46	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.0042 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0061 J J	<0.00019	<0.0095	0.013	0.019	<0.0095	0.0033 J	<0.0095	<0.0095	<0.019	<0.00019	0.02	<0.00011 U
P-66	P66-ROX-011117	1/11/2017	34.72 - 59.72	32.41	NE	<0.00097	<0.00097	<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	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00053	0.001 J	<0.0002	<0.0098	0.022	0.0058	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0001 J	<0.0098	0.000058 J
	P66-ROX-071217	7/12/2017		31.38	NE	<0.0004	<0.0004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0004	<0.0004	0.0019 J	<0.0004	<0.01	0.051 H J	0.03	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	<0.0004	<0.01	0.00022 J J
	P66-ROX-101017	10/10/2017		32.27	NE	<0.00019	<0.00019	0.0011 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.00055	0.0024 J	<0.00019	<0.0097	0.063	0.035	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	P66-ROX-011118	1/11/2018		34.09	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096 UJ	0.072	0.035	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	P66-ROX-041018	4/10/2018		34.93	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.001	<0.0099 UJ	<0.0002	<0.0099	0.1	0.037	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00065	<0.0099 UJ	<0.0002
	P66-ROX-071118	7/11/2018		35.10	NE	<0.00097	<0.00097	0.002 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	0.0011 J	<0.0097	<0.00097	<0.0097	0.07	0.045	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00033 J	<0.0097	<0.00097
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	<0.00099	<0.00099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.00099	0.0011 J	<0.0099	<0.00099	<0.0099	0.074	0.053	<0.0099	<0.02	<0.0099	<0.0099 UJ	<0.02	0.00047 J	<0.0099	<0.00099
	P66-ROX-101518	10/15/2018		35.31	NE	<0.00019	<0.00019	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.00019	<0.00019	<0.049	<0.00019	<0.049	0.046	0.023	<0.049	<0.097	<0.049	<0.049	<0.097	<0.00019	<0.049	<0.00019
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	<0.0002	<0.0002	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.0002	<0.0002	<0.049	<0.0002	<0.049	0.042	0.025	<0.049	<0.099	<0.049	<0.049	<0.099	<0.0002	<0.049	<0.0002
	P66-ROX-010919	1/9/2019		34.99	NE	<0.0002	<0.0002	<0.05 UJ	<0.05 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00075	<0.01	<0.0002	<0.01	0.031	0.012	<0.01	<0.02	<0.01	<0.05 UJ	<0.02	0.00071	<0.01	<0.0002
	P66-ROX-041619	4/16/2019		34.08	NE	<0.00099	<0.00099 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.00099	<0.0099	<0.00099	<0.0099	0.012	0.013	<0.0099	0.055	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.00019 J J
	P66-ROX-071019	7/10/2019		30.00	NE	<0.001	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00049 J J	0.0021 J	<0.0002	<0.01	0.055	0.026	<0.01	0.0063 J	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.001
	P66-ROX-101119	10/11/2019	34.72 - 59.72	29.52	NE	<0.00019 UJ	<0.00019 UJ	0.0012 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.00002 J J	0.00018 J J	<0.0096	<0.00019 UJ	<0.0096	0.01 J	0.0076 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.000038 J J	<0.0096	<0.00019 UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011217	1/12/2017	44.43 - 69.43	38.64	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000037 J
	P74-ROX-040717	4/7/2017		38.92	NE	<0.00022	<0.00022	<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	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.000065 J	<0.0099	<0.0002	<0.0099	0.00059	0.00042	<0.0099	<0.02	<0.0099	<0.0099 UJ	<0.02	<0.0002	<0.0099	<0.0002
	P74-ROX-101617	10/16/2017		38.57	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0012	0.0016	<0.0096	<0.019	<0.0096	<0.0096	<0.019 UJ	<0.00019	<0.0096	<0.00019
	P74-ROX-011018	1/10/2018		40.25	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.000085 J	<0.0095	<0.00019	<0.0095	0.002	0.0026	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000065 J	0.035	<0.00019
	P74-ROX-041018	4/10/2018	43.83 - 68.83	40.69	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099 UJ	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099 UJ	<0.0002
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099 UJ	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099 UJ	<0.0002
	P74-ROX-071118	7/11/2018		42.22	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	<0.00019	<0.0097	<0.00019
	P74-ROX-101618	10/16/2018		42.18	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.000071 J	<0.0097	<0.00019	<0.0097	0.0013	0.0014	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00004 J	0.0035 J	0.00002 J
	P74-ROX-011019	1/10/2019		42.14	NE	<0.00019	<0.00019	<0.0095	0.0017 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P74-ROX-041719	4/17/2019		41.57	NE	<0.0002	<0.0002	<0.0098	0.00096 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P74-ROX-071219	7/12/2019		37.95	NE	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	0.000022 J H J	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ
	P74-ROX-101419	10/14/2019	43.83 - 68.83	36.74	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000021 U	<0.00019	<0.0095	<0.00019	<0.0095	0.00025	0.00023	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000024 J	<0.0095	<0.00019
P-93A	P93A-ROX-011217	1/12/2017	43.07 - 53.07	41.04	NE	<0.0002	<0.0002	<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	<0.00021	<0.00021	<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	0.00013 J	0.00019	<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	<0.00021	<0.00021	<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	<0.00037	<0.00037	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.00037	<0.00037	<0.019	<0.00037	<0.019	0.00016 J	0.00018 J	<0.019	<0.037	<0.019	<0.019	<0.037 UJ	<0.00037	<0.019	<0.00037
	P93A-ROX-101117	10/11/2017		40.87	NE	<0.00019 UJ	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019 UJ
	P93A-ROX-011118	1/11/2018		42.71	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096 UJ	0.00002 J	0.000025 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.012	<0.00019
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096 UJ	0.000027 J	0.000023 J	<0.0096	<0.019	0.0019 J	0.0023 J	<0.019	<0.00019	0.0035 J	<0.00019
	P93A-ROX-041118	4/11/2018		NM	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.00092	0.00047	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000049 J	0.07	<0.0002
	P93A-ROX-052218	5/22/2018		NM	NE																							
	P93A-ROX-071218	7/12/2018		44.03	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.000029 J	<0.0098	<0.0002	<0.0098	0.00033	0.00006 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.047	<0.0002
	P93A-ROX-101618	10/16/2018		44.05	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	0.002 J	<0.0097	0.000039 J	0.000095 J	<0.0097	<0.00019	<0.0097	0.0026	0.00075	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.000086 J	0.088	<0.00019
	P93A-ROX-011419	1/14/2019		43.78	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00007 J	<0.0099	<0.0002	<0.0099	0.0015	0.00026	<0.0099	<0.02	<0.0099 UJ	<0.0099	<0.02	0.00007 J	0.071	<0.0002
	P93A-ROX-041819	4/18/2019		42.98	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.000079 J	<0.0099	<0.0002	<0.0099	0.0026	0.00026	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000059 J	0.091	<0.0002
	P93A-ROX-071519	7/15/2019		38.92	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00075	0.00012 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.048	<0.00019
	P93A-ROX-101519	10/15/2019		38.31	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00012 U	<0.00019	<0.0095	<0.00005 U	<0.0095	0.0023	0.00053	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.000084 U	0.059	<0.000085 U
P-93B	P93B-ROX-011017	1/10/2017	74.60 - 76.60	42.41	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	0.35	<0.0002
	P93B-ROX-011017-DUP	1/10/2017		42.41	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.17	<0.0002
	P93B-ROX-040617	4/6/2017		42.59	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.14	<0.00019
	P93B-ROX-071117	7/11/2017		41.59	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095 UJ	<0.019	<0.00019	0.16	<0.00019
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	0.22	<0.00019
	P93B-ROX-101117	10/11/2017		42.21	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.098 J	<0.00019
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	0.0013 J	<0.0095	<0.0095	<0.019	<0.00019	0.28 J	<0.00019
	P93B-ROX-011518	1/15/2018		44.42	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	<0.000074 U	<0.000053 U	<0.0095	0.0013 J	<0.0095	<0.0095	<0.019	<0.00019	0.058	<0.00019
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099 UJ	0.000041 J	<0.0099	0.000028 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	0.36	<0.0002
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098 UJ	<0.0002	<0.0098	0.000045 J	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.35	<0.0002
	P93B-ROX-071218	7/12/2018		45.36	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	0.019	<0.00019	<0.0097	0.0002	0.00032	0.0019 J	0.004 J	<0.0097	<0.0097	<0.019	<0.00019	0.35	<0.00019
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<0.00097	<0.00097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	<0.00019	<0.0097	<0.00097	<0.0097	<0.00019	<0.00019	0.0019 J	0.0041 J	<0.0097	<0.0097	<0.019	<0.00097	0.33	<0.00097
	P93B-ROX-101518	10/15/2018		45.64	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	0.0021 J	0.0058 J	<0.0097	<0.0097	<0.019	<0.00019	0.22 *	<0.00019
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	0.0023 J	0.0061 J	<0.0096	<0.0096	<0.019	<0.00019	0.25 *	<0.00019
	P93B-ROX-011119	1/11/2019		45.15	NE	<0.00019	<0.00019	<0.0096	<0.0096	0.0041 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	0.004 J	0.013 J	<0.0096	<0.0096	<0.019	<0.00019	0.34	<0.00019
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<0.00019	<0.00019	<0.0095	<0.0095	0.0035 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	0.0041 J	0.013 J	<0.0095	<0.0095	<0.019	<0.00019	0.21	<0.00019
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<0.0002	<0.0002	<0.01	<0.01	0.0035 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	0.0049 J	<0.01	<0.01	<0.02	<0.0002	0.22	<0.0002
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	0.0045 J	<0.0099	<0.0099	<0.02	<0.0002	0.24	<0.0002
	P93B-ROX-071219	7/12/2019		40.35	NE	<0.0002 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.02 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.02 H UJ	<0.0002 H UJ	0.26 H J	<0.0002 H UJ
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0002 H UJ	0.24 H J	<0.0002 H UJ
	P93B-ROX-101519	10/15/2019	74.78 - 76.78	39.62	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.15	<0.00019
	P93B-ROX-101519-DUP	10/15/2019		39.62	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.13	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011117	1/11/2017	92.47 - 97.47	42.20	NE	<0.0002	<0.0002	<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	<0.00019	0.000048 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	0.000051 J	<0.0095	0.000033 J	0.000037 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P93C-ROX-071217	7/12/2017		41.30	NE	<0.00039	<0.00039	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.00039	<0.00039	<0.0098	<0.00039	<0.0098	0.000083 J	<0.00039	<0.0098	<0.02	<0.0098	<0.0098 UJ	<0.02	<0.00039	<0.0098	<0.00039
	P93C-ROX-101117	10/11/2017		42.04	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	P93C-ROX-011118	1/11/2018		43.95	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	0.000033 J	0.000034 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P93C-ROX-041118	4/11/2018	92.88 - 97.88	44.69	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.000054 U	<0.01	0.000048 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002
	P93C-ROX-071218	7/12/2018		45.22	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	0.000062 J	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021
	P93C-ROX-101518	10/15/2018		45.31	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.013	<0.0002
	P93C-ROX-011019	1/10/2019		45.01	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.041	<0.00019
	P93C-ROX-041819	4/18/2019		44.15	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000021 J	0.000034 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P93C-ROX-071219	7/12/2019		40.18	NE	<0.0002 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.02 H UJ	<0.01 H UJ	<0.01 H UJ	<0.02 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.0002 H UJ
	P93C-ROX-101419	10/14/2019	92.88 - 97.88	39.65	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00017 J	0.00017 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
P-93D	P93D-ROX-011017	1/10/2017	125.75 - 127.75	42.59	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P93D-ROX-071117	7/11/2017		41.64	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019
	P93D-ROX-101117	10/11/2017		42.42	NE	<0.00019 UJ	<0.00019 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019 UJ	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.00019 UJ	<0.00019 UJ	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000051 J	<0.0002	<0.01 UJ	0.00015 J	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000076 J
	P93D-ROX-071218	7/12/2018		45.57	NE	<0.0011	<0.0011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.0011	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.0011
	P93D-ROX-101518	10/15/2018		45.70	NE	<0.00019	0.000097 J	<0.0097	<0.0097	<0.0097	<0.0097	0.00057 J	<0.0097	0.000035 J	<0.00019	<0.0097	0.000073 J	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	0.000035 J
	P93D-ROX-011119	1/11/2019		45.31	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	P93D-ROX-041819	4/18/2019		44.50	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	0.00094 J	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P93D-ROX-071219	7/12/2019		40.53	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002
	P93D-ROX-101519	10/15/2019	125.75 - 127.75	39.88	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000019 J	0.000021 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
P-114R	P114R-ROX-010617	1/6/2017	23.01 - 33.01	24.81	NE	<0.0002	<0.0002	<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	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0001 J	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.00011 J	<0.01	<0.0002
	P114R-ROX-071117	7/11/2017		22.45	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000095 J	0.00014 J	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	0.00015 J	<0.0096	<0.00019
	P114R-ROX-101017	10/10/2017		24.45	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	P114R-ROX-010918	1/9/2018		26.37	NE	<0.00095	<0.00095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	0.00028 J	<0.0095	<0.00095	<0.0095	0.000095 J	0.0001 J	<0.0095	<0.019	<0.0095	<0.0095 UJ	<0.019 UJ	<0.00095	<0.0095	<0.00095
	P114R-ROX-040618	4/6/2018		26.76	NE	<0.0002	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002
	P114R-ROX-070918	7/9/2018		26.38	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00017 J	<0.0097	<0.00019
	P114R-ROX-101118	10/11/2018		26.27	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<0.00039	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.00039
	P114R-ROX-010719	1/7/2019		25.88	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	0.000052 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
	P114R-ROX-041519	4/15/2019		24.70	NE	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00016 J	<0.0002	<0.01	<0.001	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.000043 J	<0.01	<0.001
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<0.0002	<0.00099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000057 J	<0.0002	<0.0099	<0.00099	<0.0099	0.000042 J	0.000091 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000031 J	<0.0099	0.000053 J
	P114R-ROX-070919	7/9/2019		19.48	NE	<0.00096 UJ	<0.00096 UJ	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00096 UJ	<0.00096 UJ	<0.048	<0.00096 UJ	<0.048	<0.00096 UJ	<0.00096 UJ	<0.048	0.0054 J	<0.048	<0.048	<0.096	<0.00096 UJ	<0.048	<0.00096 UJ
	P114R-ROX-100919	10/9/2019	23.01 - 33.01	20.46	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000041 J	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	0.00012 J
ROST-3-MW	ROST3MW-ROX-011117	1/11/2017	37.81 - 47.81	37.50	NE	<0.00019	<0.00019	<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	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00064 U	<0.0095	<0.00019	0.000065 J	<0.0095	<0.00019	<0.0095	0.0025	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000085 J	<0.0095	<0.00019
	ROST3MW-ROX-071117	7/11/2017		36.61	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.000085 J	<0.01	<0.0002	<0.01	0.0029	0.0014	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	0.00018 J	<0.01	0.00003 J
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.000062 J	<0.0096	<0.00019	<0.0096	0.0015	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE																							
	ROST3MW-ROX-011518	1/15/2018		40.00	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0018 J J	0.000035 J	0.000061 J	<0.0095	<0.00019	<0.0095 UJ	0.0011 B	<0.000042 U	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000058 J	<0.0095	0.000025 J
	ROST3MW-ROX-022618	2/26/2018		40.00	NE																							
	ROST3MW-ROX-040618	4/6/2018		39.98	NE	<0.0002	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.000087 J	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.000067 J	<0.0098	<0.0002
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.00043 B	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	0.000054 J	<0.01	<0.00021
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000095	0.00016 J	<0.0095	<0.000095	<0.0095 UJ	0.00032	0.000091 J J	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.00026 J	<0.0095	0.00002 J
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.0001 J	<0.0095	<0.00019	<0.0095	0.00016 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00013 J	<0.0095	<0.00019
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.000079 J	<0.0098	<0.0002	<0.0098	0.00022	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.000094 J	<0.0098	<0.0002
	ROST3MW-ROX-071119	7/11/2019		36.38	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	0.00012 J	<0.0096	<0.00019	<0.0096	0.0036	0.0014	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00015 J	<0.0096 UJ	<0.00019
	ROST3MW-ROX-101419	10/14/2019	37.81 - 47.81	35.57	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095	0.00015 J	0.000027 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000045 J	<0.0095	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)						0.012 [1]	0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
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-011217	1/12/2017	34.95 - 44.95	37.88	NE	<0.00019	<0.00019	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	<0.00019	<0.00019	<0.0097	0.00075 J	<0.0097	<0.0097	<0.0097	<0.0097	0.000022 J	0.00066	<0.0097	<0.00019	<0.0097	0.026	0.016	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00045	<0.0097	0.000043 J
	ROST4PZC-ROX-071217	7/12/2017		37.20	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01 UJ	<0.01	<0.01	<0.01	<0.0002	0.00013 J	<0.01	<0.0002	<0.01	0.00014 J	<0.0002	<0.01 UJ	0.0026 J J	<0.01 UJ	<0.01 UJ	<0.02 UJ	<0.0002	<0.01 UJ	<0.0002
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	<0.00096 UJ	<0.00096 UJ	<0.0096	<0.0096	0.012	<0.0096	<0.0096	<0.0096	<0.00019	0.0013	0.0021 J	<0.00096 UJ	<0.0096	0.058	0.07	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.0031	<0.0096	<0.00096 UJ
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	0.00005 J	0.00071	<0.0095	<0.00019	<0.0095 UJ	0.026 B	0.0025 B	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0021	<0.0095	0.00012 J
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0002	<0.01	<0.0002	<0.01 UJ	0.0043	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.00068	<0.01	0.00006 J
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.00019 J	<0.011	<0.00022	<0.011	0.002	0.00011 J	<0.011	<0.022	<0.011	<0.011	<0.022	0.00062	<0.011	0.000034 J
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	0.00032	0.0012 J	<0.0002	<0.0098 UJ	0.0064	0.00058	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00083	<0.0098 UJ	<0.0002
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00003 J	0.00068	<0.01	<0.0002	<0.01	0.019	0.0065	<0.01	<0.02	<0.01	<0.01	<0.02	0.0017	<0.01	0.000061 J
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000024 J	0.0005	<0.01	<0.0002	<0.01	0.02	0.0018	<0.01	<0.02	<0.01	<0.01	<0.02	0.00078	<0.01	0.000052 J
	ROST4PZC-ROX-071219	7/12/2019		37.64	NE	<0.00097 H UJ	<0.00097 H UJ	0.00094 J H J	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.00097 H UJ	0.0016 H J	0.0015 J H J	<0.00097 H UJ	<0.0097 H UJ	0.072 H J	0.066 H J	<0.0097 H UJ	<0.019 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.019 H UJ	0.0041 H J	<0.0097 H UJ	<0.00097 H UJ
	ROST4PZC-ROX-101419	10/14/2019	34.95 - 44.95	35.97	NE	<0.00019	<0.00019	0.0016 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000066 U	0.0013	<0.0095 UJ	<0.00019	<0.0095	0.035	0.0078	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0037	<0.0095	<0.00011 U
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	<0.0002	<0.0002	0.00066 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.00012 J	0.0014	0.004 J	<0.0002	<0.0099	0.033	0.036	<0.0099	0.0014 J	<0.0099	<0.0099	<0.02	0.0041	0.0065 J	0.0002
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	<0.00019	<0.00019	0.00072 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	0.000066 J	0.0012	0.003 J	<0.00019	<0.0095 UJ	0.046 B	0.045 B	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0032	<0.0095	0.00019
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	<0.0002	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	0.00011 J	<0.0002	<0.01	<0.0002	<0.01 UJ	0.024	0.019	<0.01	<0.02	<0.01	<0.01	<0.02	0.0021	<0.01	0.00045
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	0.00018 J	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.00054	<0.00022	<0.011	0.000061 J	<0.011	0.011	0.014	<0.011	<0.022	<0.011	<0.011	<0.022	0.0042	<0.011	0.0008
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.0002	<0.0002	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.0002	<0.0002	<0.049	<0.0002	<0.049	0.0051	0.004	<0.049	<0.098	<0.049	<0.049	<0.098	0.0028	<0.049	<0.0002
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	0.00038	<0.00038 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.00095	<0.00038	<0.0095	<0.00038 UJ	<0.0095	0.0015	0.0018	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00038	<0.0095	0.0015
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	<0.00098	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00019 J	<0.0098	<0.0002	<0.0098	0.0019 J	0.0021 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0014	<0.0098	0.00042 J
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0029 J	0.0032 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.0014	<0.0097	0.00024
	ROST4PZE-ROX-071219	7/12/2019		NM	NE	0.00028 J H J	<0.00098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	0.00044 J H J	0.0025 H J	<0.0098 H UJ	<0.00098 H UJ	<0.0098 H UJ	0.048 H J	0.021 H J	<0.0098 H UJ	<0.02 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.02 H UJ	0.01 H J	0.026 H J	0.0012 H J
	ROST4PZE-ROX-101519	10/15/2019	34.75 - 44.75	35.01	NE	<0.00019	<0.00019	0.0018 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.00012 J B	0.0016	0.0059 J J	<0.00019	<0.0095	0.053	0.059	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0057	0.0042 J *	0.00036 B
ROST-4-PZ(G)	ROST4PZG-ROX-101217	10/12/2017	34.28 - 44.28	36.58	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.00019	0.00012 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	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	<0.0002	<0.0002	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0098	0.000026 J	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0001 J	<0.0098	0.000032 J
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	0.000087 J	<0.011	<0.00021
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097 UJ	0.00012 J	0.00014 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00013 J	<0.0097 UJ	<0.00019
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000093 J	<0.0095	<0.00019
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<0.00019	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00006 J	<0.0095	<0.00019 UJ	<0.0095	0.000022 J	0.000025 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000058 J	<0.0095	<0.00019
	ROST4PZG-ROX-071219	7/12/2019		36.60	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.000038 J	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	0.0015 J	<0.0096	<0.0096	<0.019	0.000031 J	<0.0096	<0.00019
	ROST4PZG-ROX-100719	10/7/2019	34.28 - 44.28	35.69	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019
T-12	T12-ROX-011217	1/12/2017	46.83 - 72.83	40.70	NE	<0.0002	<0.0002	<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	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	0.0038 J	<0.0096 UJ	<0.0096	<0.00019	<0.00019	0.0044 J	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.021	<0.00019
	T12-ROX-071317	7/13/2017		40.10	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	0.0035 J	<0.0095	<0.0095	0.000041 J	0.00027	0.0014 J	<0.00019	<0.0095	0.018	0.026	<0.0095	<0.019	<0.0095	<0.0095	<0.019 UJ	0.00053	0.028	0.000072 J
	T12-ROX-101317	10/13/2017		39.48	NE	<0.0002	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00045	0.0017 J	<0.0002	<0.0098	0.03	0.033	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00084	0.052	0.000061 J
	T12-ROX-011018	1/10/2018		42.14	NE	<0.00019	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.00002 J	0.00029	<0.0096	<0.00019	<0.0096	0.021	0.033	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00062	0.08	0.000038 J
	T12-ROX-041218	4/12/2018		43.03	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00031	<0.0099 UJ	<0.0002	<0.0099	0.033	0.036	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.0008	0.037	<0.0002
	T12-ROX-071118	7/11/2018		44.12	NE	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.00028	<0.011	<0.00022	<0.011	0.022	0.034	<0.011	<0.022	<0.011	<0.011 UJ	<0.022	0.00054	0.053	0.000033 J
	T12-ROX-101618	10/16/2018		43.90	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	0.003 J	0.0017 J	<0.0097	0.000057 J	0.00046	<0.0097	<0.00019	<0.0097	0.022	0.031	<0.0097	<0.019	<0.0097	<0.0097 UJ	0.0018 J	0.00065	0.032	0.000054 J
	T12-ROX-011019	1/10/2019		44.00	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	0.0037 J	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.022	0.032	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00094	0.065	0.000084 J
	T12-ROX-041719	4/17/2019		43.38	NE	<0.0002	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000028 J	0.00033	<0.0099	<0.0002	<0.0099	0.019	0.027	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00068	0.048	0.000046 J J
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																							
	T12-ROX-071519	7/15/2019		39.74	NE	<0.00019	<0.00019	<0.0097	<0.0097	<0.0097	0.0034 J	<0.0097	<0.0097	<0.00019	0.0002	<0.0097	<0.00019	<0.0097	0.025	0.034	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00047	0.076	<0.00019
	T12-ROX-101519	10/15/2019	46.83 - 72.83	38.40	NE	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	0.0053 J	<0.0095	<0.0095	<0.00019	<0.00019	0.0015 J J	<0.00019	<0.0095	0.018	0.026	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0005 B	0.063	<0.00019

Notes:

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

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

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

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

The screened interval for certain monitoring wells was adjusted based on an evaluation of the results of annual bottom depth gauging conducted in 1Q18 and 1Q19.

Indicates a historical exceedance of screening criteria.

Indicates a current exceedance of screening criteria.

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

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

LABORATORY QUALIFIERS

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

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

H = Analyzed or extracted out of holding time criteria.

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

F2 = MS/MSD RPD exceeds control limits.

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

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

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

AECOM QUALIFIERS

J = The result is estimated.

UJ = Estimated non-detect.

U = Result is non-detect.

Figures

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

MVS Descriptions and Assumptions:

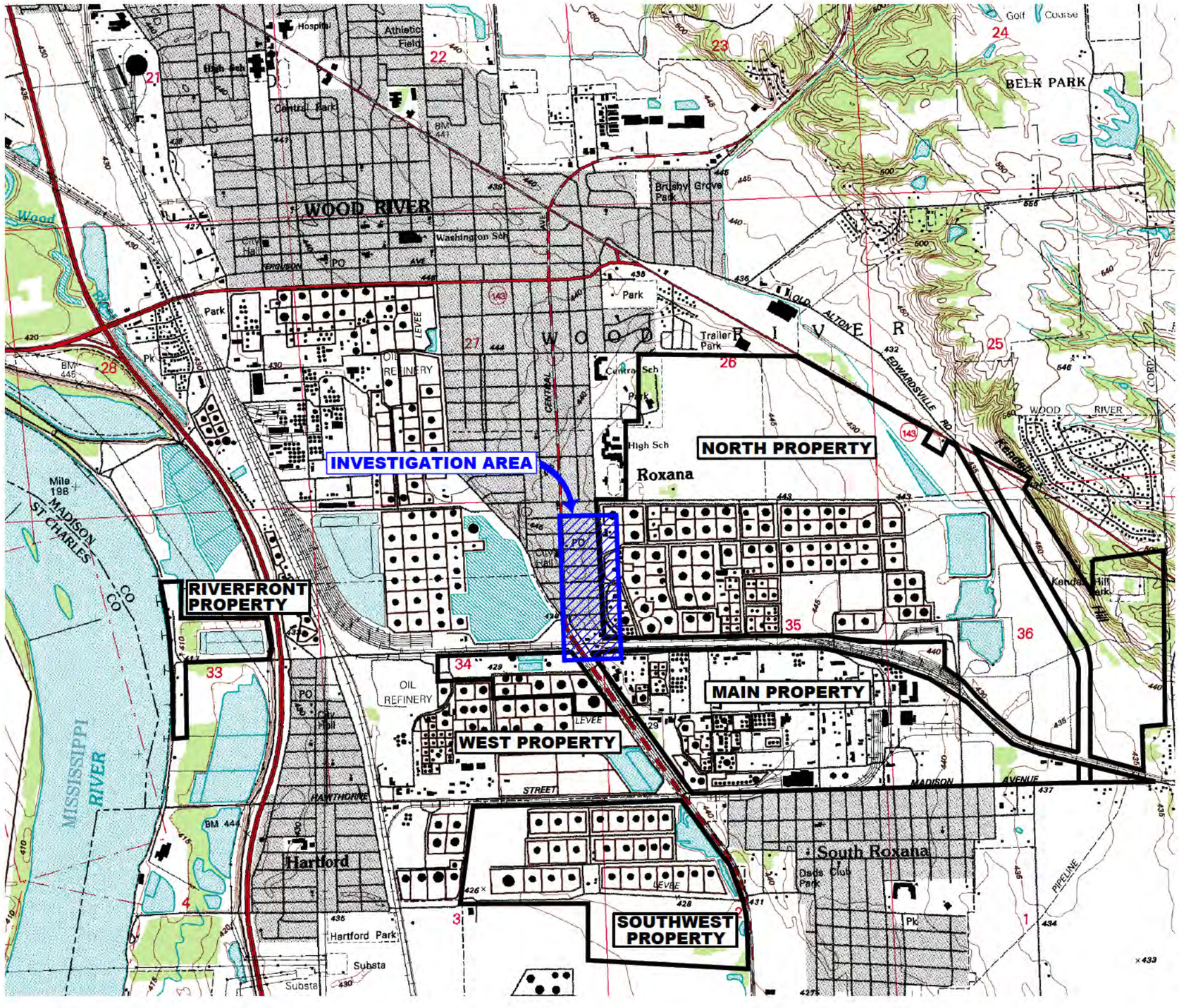
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

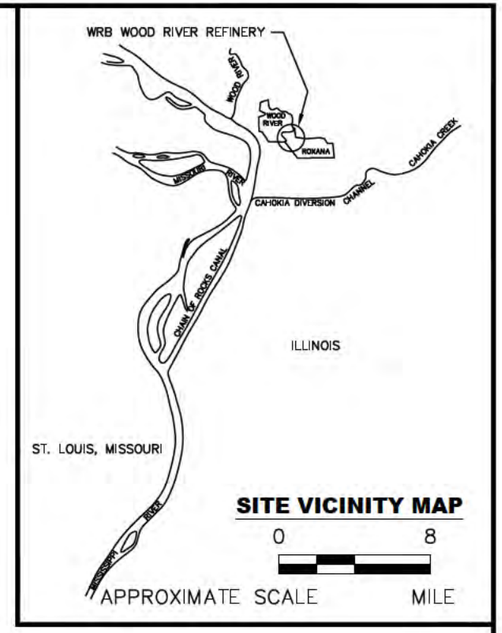
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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

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

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





LEGEND

WOOD RIVER REFINERY PROPERTY BOUNDARY

INVESTIGATION AREA

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

0 2000

APPROXIMATE SCALE FEET

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

PROJECT NO. 60592794

AECOM

DRN. BY:gds January 2020
DSGN. BY: wmp
CHKD. BY: b3

Investigation Area Location Map

FIG. NO. 1

File: G:\GIS\PROJECTS\OOS_AMERICAS\SHELL\GP00686-900_S_CENTRAL_AVE-ROXANA-ILN\02_WORKSPACE\FIGURE 1_INVESTIGATION_AREA_LOCATION_MAP.DWG Last edited: 11/13/19 @ 9:43 AM @ WCC-ST LOUIS

File: G:\GIS\PROJECTS\DCS AMERICAS\SHELL\USF00686-900_S_CENTRAL_AVE-ROXANA-IL\02. WORKSPACE\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Nov. 13, 19 @ 9:48 AM by: popoo

LEGEND

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

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

PZ-1(101)
PZ-1(85)
MW-9 *
MW-10 *
MW-28 *
MW-27 *
P-55R *
T-1
ROST-4-PZ(A)
ROST-4-PZ(B)
ROST-4-PZ(C) *
ROST-4-PZ
P-60-11
ROST-3-MW *
ROST-4-PZ(D)
ROST-4-PZ(E) *
ROST-4-PZ(F)
P-60-S
P-60-12
P-60
A-28
T-24
ROST-4-PZ(G) *
P-68 *
P-60-13
MW-11 *
P-54 *
MW-17
T-12 *
MW-24 *
MW-22 *
P-69
A-27
P-70
MW-18
P-74 *
MW-19
P-59 *
P-61
MW-16 *
GP-9-PZ
PZ-2(84)
PZ-2(70.5)
MW-12 *
MW-20
P-56 *
MW-2 *
MW-1 *
T-6
MW-26 *
MW-21
P-57 *
MW-4 *
P-93A *
P-93B *
P-93C *
P-93D *
P-73
MW-3 *
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:gds January 2020
DSGN. BY:wmp
CHKD. BY:mr/b3

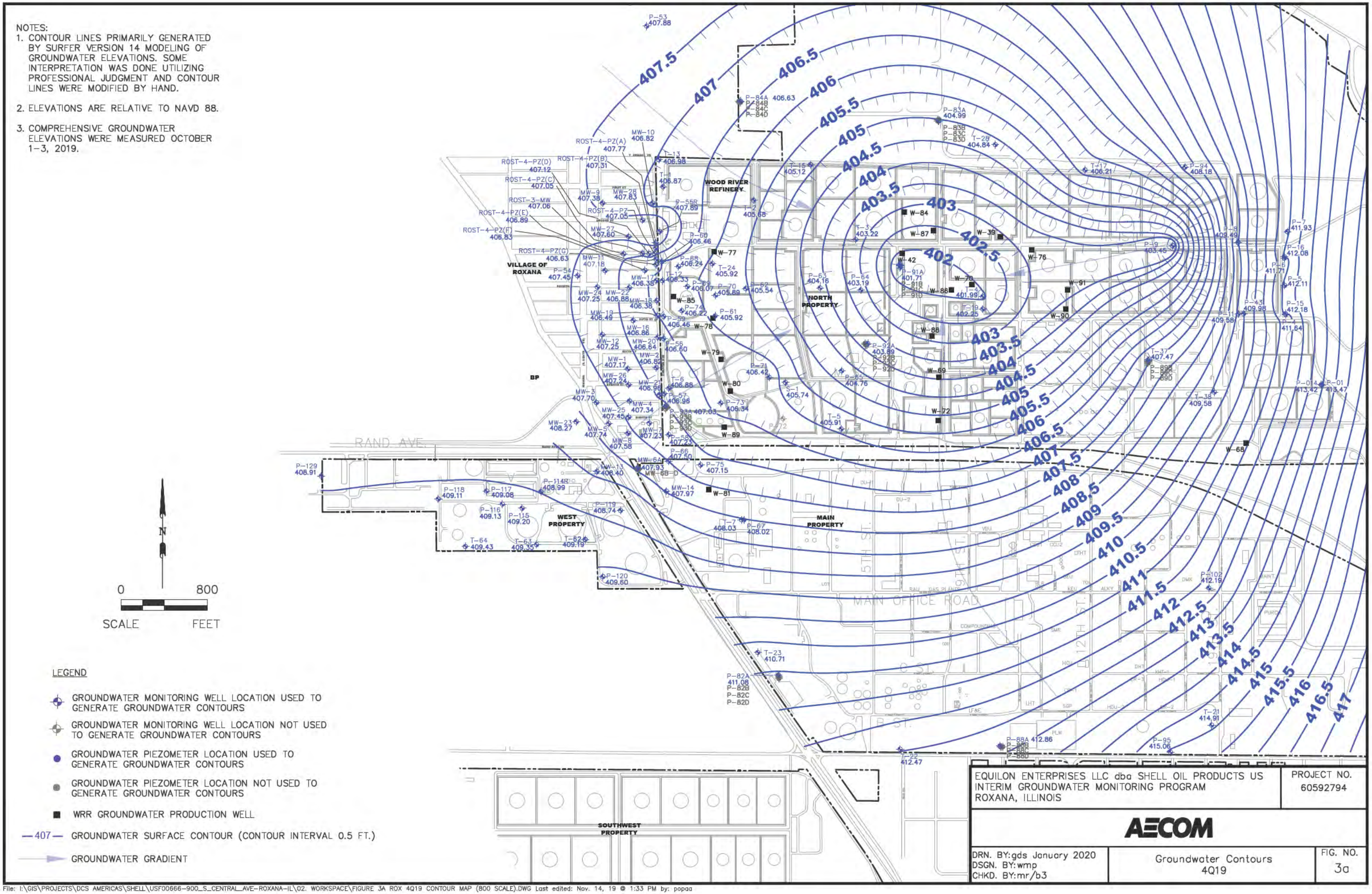
Roxana Interim Groundwater Monitoring Well Locations

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 OCTOBER 1–3, 2019.



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:gds January 2020
DSGN. BY:wmp
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Groundwater Contours
4Q19

FIG. NO. 3a

File: I:\GIS\PROJECTS\DCS AMERICAS\SHELL\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\02. WORKSPACE\FIGURE 3A ROX 4Q19 CONTOUR MAP (800 SCALE).DWG Last edited: Nov. 14, 19 @ 1:33 PM by: popaa

File: I:\GIS\PROJECTS\DCS AMERICAS\SHELL\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\02. WORKSPACE\FIGURE 3B ROXANNA 4Q19 CONTOUR MAP1.DWG Last edited: Nov. 14, 19 @ 1:05 PM by: popaa

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
- 406 GROUNDWATER SURFACE CONTOUR (CONTOUR INTERVAL 0.5 FT)
- GROUNDWATER GRADIENT

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

FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
RAND AVENUE
LEGRIS DRIVE

NORTH PROPERTY
VILLAGE OF ROXANA
WOOD RIVER REFINERY
WEST PROPERTY
MAIN PROPERTY
BP
PUBLIC WORKS YARD
1986 APPROXIMATE BENZENE RELEASE SITE

T-1 406.87
MW-9 407.38
MW-10 406.82
MW-28 407.83
ROST-4-PZ(B) 407.31
MW-27 407.60
P-55R 407.89
ROST-4-PZ 407.05
ROST-4-PZ(D) 407.12
ROST-4-PZ(A) 407.17
ROST-4-PZ(C) 407.05
ROST-3-MW 407.06
P-60 406.46
P-68 406.24
ROST-4-PZ(E) 406.89
ROST-4-PZ(F) 406.83
T-24 405.92
MW-11 407.18
ROST-4-PZ(G) 406.63
P-54 407.45
MW-22 406.88
T-12 406.33
MW-24 407.25
MW-17 406.38
P-69 406.07
P-70 405.89
MW-18 406.38
P-74 406.22
P-61 405.92
MW-19 406.49
P-59 406.46
MW-16 406.86
MW-20 406.64
MW-12 407.25
P-56 406.60
MW-1 407.17
MW-2 406.82
T-6 406.88
MW-21 406.96
P-57 406.96
MW-26 407.24
MW-3 407.70
MW-4 407.34
P-73 406.34
P-93A 407.03
P-93B
P-93C
P-93D
MW-25 407.45
MW-5 407.74
MW-23 408.27
MW-8 407.58
MW-7 407.23
P-58 407.23
P-66 407.50
P-75 407.15
MW-13 408.40
MW-6A 407.93
MW-6B
MW-6C
MW-6D
MW-14 407.97
P-114R 408.99

407.5
406
407
406.5
408
408.5
409

W-77 W-85 W-78 W-79 W-89 W-81

A-28 A-27

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60592794
AECOM	
DRN. BY: gds January 2020 DSGN. BY: wmp CHKD. BY: mr/b3	Groundwater Contours 4Q19– West Fenceline
	FIG. NO. 3b

File: I:\GIS\PROJECTS\DCS AMERICAS\SHELL\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\02. WORKSPACE\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE).DWG Last edited: Dec. 6, 19 @ 9:19 AM by: popaa

LEGEND

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

NOTE:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCELINE AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON OCTOBER 1–3, 2019.
3. LNAPL THICKNESS AT P–60 WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON OCTOBER 15, 2019. LNAPL WAS NOT DETECTED AT P–60 DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON OCTOBER 1–3, 2019.

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

P–84A P–84B P–84C P–84D
T–13 T–1 T–2
MW–9 MW–10
ROST–4–PZ(A) MW–28 ROST–4–PZ(B) ROST–4–PZ(D) MW–27 ROST–4–PZ(C) ROST–3–MW ROST–4–PZ
ROST–4–PZ(E) ROST–4–PZ(F) ROST–4–PZ(G)
P–54 MW–11 MW–17 T–12 MW–24 MW–22 MW–18 MW–19 P–59 MW–16 MW–12 MW–20 P–56
MW–2 MW–1 MW–26 T–6 MW–21 P–57 MW–3 MW–4 MW–25 P–93A P–93B P–93C P–93D MW–23 MW–5 MW–8 MW–7 P–58 0.01*
MW–13 P–117 P–114R P–116 P–115 P–119 MW–6 P–66 P–75 MW–14 R–81 W–81 T–7 P–67 0.05*
P–69 W–85 P–74 P–70 0.01* P–61 R–78 W–78 P–62 0.03* P–71 S–1 0.01 R–80 W–80 P–73 P–72 R–89 W–89 R–79 W–79
P–55R 0.06* 0.01
P–60 0.01 0.01 P–68 0.04* 0.10 T–24 0.33* R–77 W–77 A–23 A–33 A–27

0 300
SCALE FEET

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

PROJECT NO. 60592794

AECOM

DRN. BY:gds January 2020
DSGN. BY:wmp
CHKD. BY:mr\b3

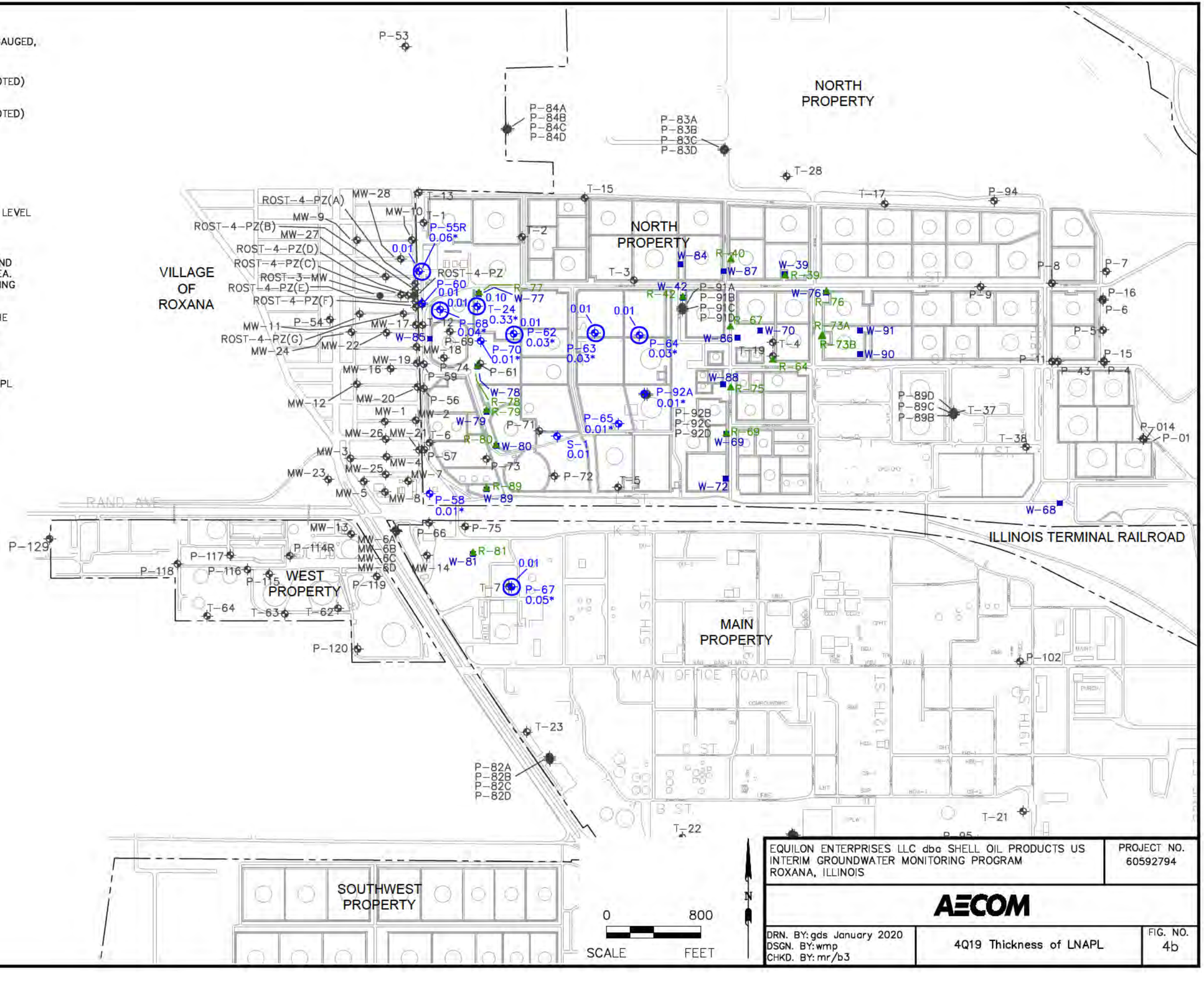
4Q19 Thickness of LNAPL – West Fenceline

FIG. NO. 4a

LEGEND

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

NOTES:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WRR AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON OCTOBER 1–3, 2019.
3. LNAPL THICKNESS AT P–60 WAS MEASURED DURING THE QUARTERLY GROUNDWATER SAMPLING EVENT ON OCTOBER 15, 2019. LNAPL WAS NOT DETECTED AT P–60 DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON OCTOBER 1–3, 2019.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60592794
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DRN. BY: gds January 2020 DSGN. BY: wmp CHKD. BY: mr/b3	4Q19 Thickness of LNAPL	FIG. NO. 4b

File: I:\GIS\PROJECTS\OCS AMERICAS\SHELL\US\60592794 - 800 S. CENTRAL AVE - ROXANA - IL\02 - WORKSPACE\FIGURE 4B THICKNESS OF LNAPL (REFINED).mxd Last edited: Dec. 06, 19 @ 9:19 AM by: jaspa

File: I:\GIS\PROJECTS\DCS_AMERICAS\SHELL\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\02_WORKSPACE\FIGURE 5 4Q19 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Dec. 05, 19 @ 4:38 PM by: popop

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

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

Analyte	Screening Criteria (mg/L)
Benzene	0.005
Ethylbenzene	0.7
Naphthalene	0.14
1,2,4-Trimethylbenzene	0.07
1,3,5-Trimethylbenzene	0.07
bis(2-Ethylhexyl)phthalate	0.006
2-Methylnaphthalene	0.028
Phenol	0.1

J = THE RESULT IS ESTIMATED.

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

3. MULTIPLE RESULTS (e.g., 1700/1600) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
4. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g., <0.013 mg/L)
5. WELLS IDENTIFIED IN BLUE WITH NO DATA BOX INDICATE THE RESULTS DID NOT EXCEED SCREENING CRITERIA.
6. WELLS P-55R, P-58, AND P-68 WERE NOT SAMPLED DURING 4Q19 DUE TO THE PRESENCE OF LNAPL.

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-25 MW-23 MW-5 MW-7 MW-8 MW-13 MW-6A MW-6B MW-6C MW-6D MW-14 P-114R

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-4-PZ ROST-3-MW

P-54 P-55R P-58 P-59 P-60 P-61 P-66 P-68 P-69 P-70 P-73 P-74 P-75 P-56 P-57 P-93A P-93B P-93C P-93D T-6 T-12 T-24 A-27 A-28

SECOND ST THIRD ST FOURTH ST FIFTH ST SIXTH ST SEVENTH ST EIGHTH ST RAND AVENUE

HIGHWAY 111 (S. CENTRAL AVE) CHAFFER AVE

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

1986 APPROXIMATE BENZENE RELEASE SITE

Sample Location	ROST-4-PZ(E)
Sampled 10/15/19	Result (mg/L)
Benzene	0.19
Naphthalene	0.16
1,2,4-Trimethylbenzene	0.22
2-Methylnaphthalene	0.059

Sample Location	T-12
Sampled 10/15/19	Result (mg/L)
Benzene	2.6

Sample Location	MW-22
Sampled 10/15/19	Result (mg/L)
1,2,4-Trimethylbenzene	0.055 J / 0.071 J

Sample Location	P-74
Sampled 10/14/19	Result (mg/L)
Benzene	0.033

Sample Location	P-59
Sampled 10/15/19	Result (mg/L)
Benzene	2.1
Ethylbenzene	0.86
Naphthalene	0.15
1,2,4-Trimethylbenzene	0.38
1,3,5-Trimethylbenzene	0.09

Sample Location	MW-2
Sampled 10/10/19	Result (mg/L)
1,2,4-Trimethylbenzene	1.2

Sample Location	P-57
Sampled 10/15/19	Result (mg/L)
Benzene	2.3 / 2.3
2-Methylnaphthalene	0.03 / 0.026

Sample Location	P-93A	P-93B
Sampled 10/15/19	Result (mg/L)	Result (mg/L)
Benzene	220	170 / 150
Phenol		0.15 / 0.13

Sample Location	MW-7
Sampled 10/8/19	Result (mg/L)
Benzene	1700 / 1600
Phenol	0.14 / 0.07

Sample Location	MW-25
Sampled 10/8/19	Result (mg/L)
Benzene	0.044

Sample Location	MW-8
Sampled 10/8/19	Result (mg/L)
Benzene	110
Naphthalene	1.2
Phenol	0.27 H J

Sample Location	MW-6C
Sampled 10/10/19	Result (mg/L)
bis(2-Ethylhexyl)phthalate	0.015 / <0.013

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:gds January 2020
DSGN. BY:mr
CHKD. BY:mr/b3

4Q19 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

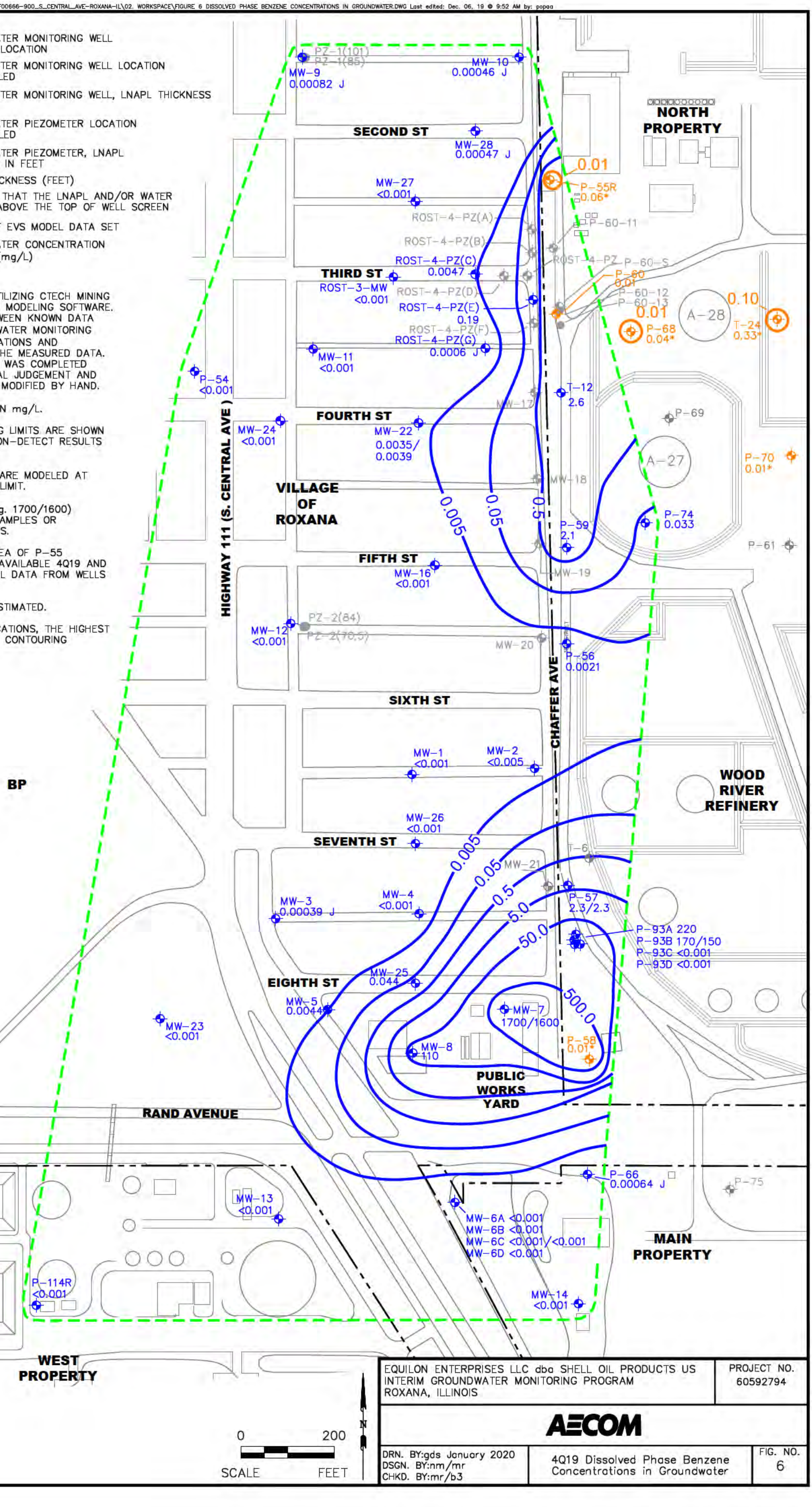
File: I:\GIS\PROJECTS\DCS AMERICAS\SHELL\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\02. WORKSPACE\FIGURE 6 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Dec. 06, 19 @ 9:52 AM by: popaa

LEGEND

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

NOTES:

1. IMAGES GENERATED UTILIZING CTECH MINING VISUALIZATION SYSTEM MODELING SOFTWARE. CONCENTRATIONS BETWEEN KNOWN DATA POINTS (E.G. GROUNDWATER MONITORING WELLS) ARE INTERPOLATIONS AND EXTRAPOLATIONS OF THE MEASURED DATA. SOME INTERPRETATION WAS COMPLETED UTILIZING PROFESSIONAL JUDGEMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
2. ALL RESULTS SHOWN IN mg/L.
3. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g., <0.001 mg/L).
4. NON-DETECT VALUES ARE MODELED AT HALF THE REPORTING LIMIT.
5. MULTIPLE RESULTS (e.g. 1700/1600) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55 ADJUSTED BASED ON AVAILABLE 4Q19 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.



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ROXANA, ILLINOIS

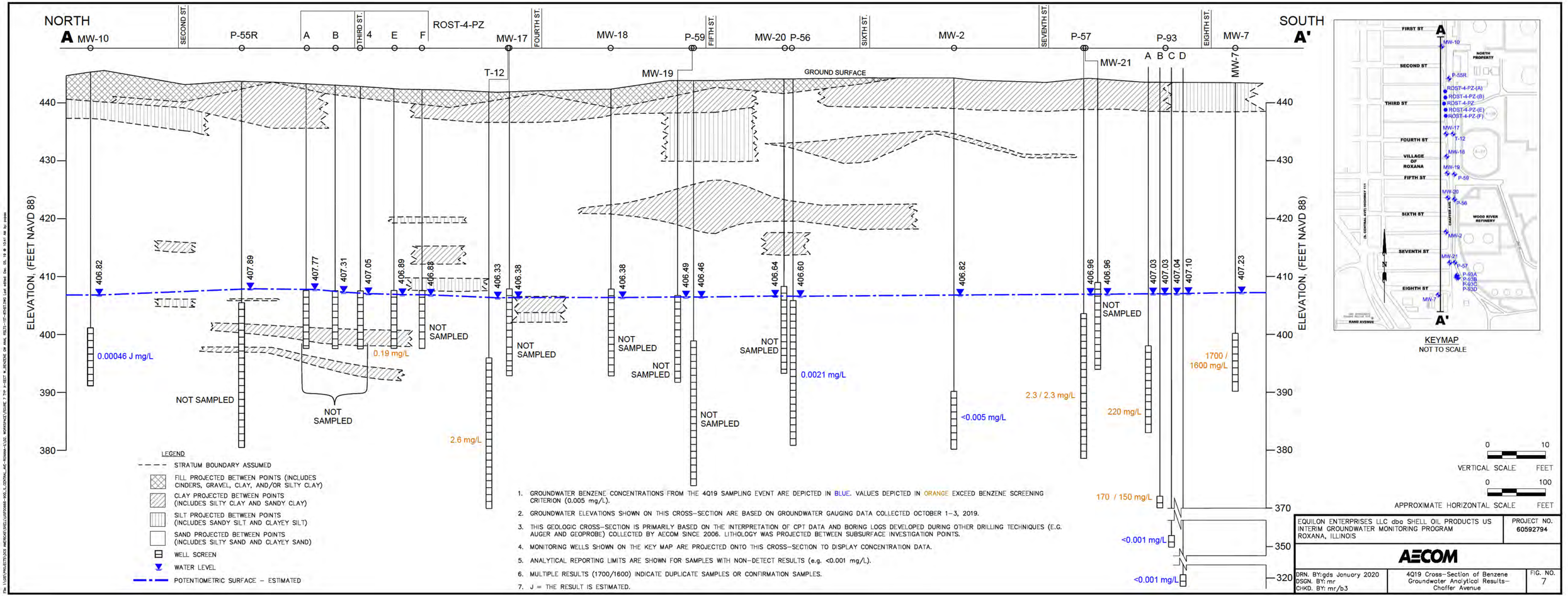
PROJECT NO. 60592794

AECOM

DRN. BY:gds January 2020
DSGN. BY:nm/mr
CHKD. BY:mr/b3

4Q19 Dissolved Phase Benzene Concentrations in Groundwater

FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 4Q19 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED OCTOBER 1–3, 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 (1700/1600) 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

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INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60592794

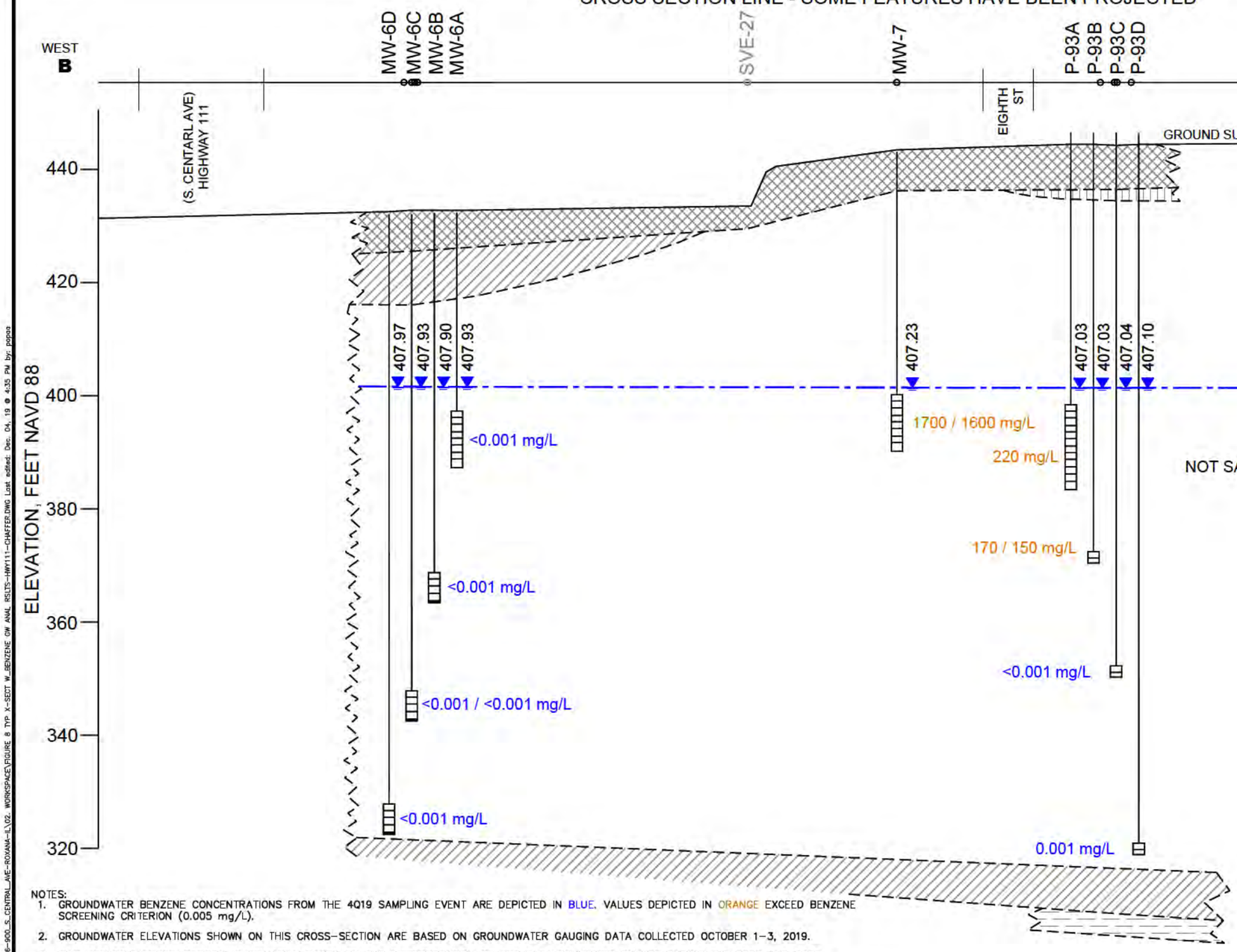
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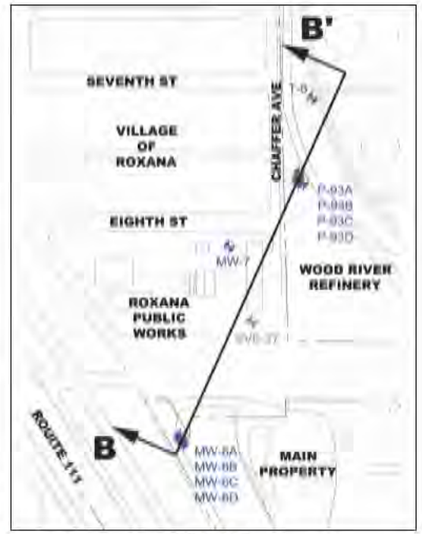
DRN. BY: gds January 2020
DSGN. BY: mr
CHKD. BY: mr/bJ

4Q19 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 4Q19 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED OCTOBER 1-3, 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 (1700/1600) 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:gds January 2020 DSGN. BY:mr CHKD. BY:mr/b3	4Q19 Cross-Section of Benzene Groundwater Analytical Results–Roxana Public Works Yard
	FIG. NO. 8

File: I:\GIS\PROJECTS\DGS AMERICAS\SHELL\US50686-900_S_CENTRAL_AVE-ROXANA-IL\02. WORKSPACE\FIGURE 8 TYP X-SECT W_BENZENE GW ANAL RSLTS-HWY111-CHAFFER.DWG Last edited: Dec. 04, 19 @ 4:35 PM by: pgoss

Appendix A

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/11/19 | WEATHER: 45°F Cloudy, Windy

MONITORING WELL ID: MW-1 | SAMPLE ID: MW1-ROX-101119

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 53.80 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 59.13 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.73 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 48.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 23.41 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1256	35.73	Cloudy	Slight	16.7	2.10	0.768 mS/cm uS/cm	7.06	-0.1	64.92
300	1257	35.73			16.8	1.57	0.770 mS/cm uS/cm	7.05	-0.1	62.09
600	1258	35.73			16.8	1.37	0.771 mS/cm uS/cm	7.05	*0.8	60.80
900	1259	35.73			17.0	1.15	0.771 mS/cm uS/cm	7.04	1.8	60.68
1200	1300	35.73			17.0	1.04	0.771 mS/cm uS/cm	7.04	3.0	59.87
2700	1305	35.73			17.5	0.92	0.773 mS/cm uS/cm	7.02	8.1	35.12
3000	1306	35.73			17.4	0.85	0.773 mS/cm uS/cm	7.02	8.6	31.14
3300	1307	35.73			17.6	0.78	0.773 mS/cm uS/cm	7.02	9.4	25.77
3600	1308	35.73			17.6	0.75	0.773 mS/cm uS/cm	7.02	9.9	24.65
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1256 | Elapsed Time (min): ~~315~~ 12 | Water Quality Meter ID & SN: YSI ProDSS - 19D101

Stop Time: 1308 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10/11/19

SAMPLING DATA

Sample Date: 10/11/19 | 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: EB

VOA Vials, No Headspace ☒ Initials: BH BB

COMMENTS:

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

Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: B. Howell, B. Burleson

DATE: 10/10/19 | WEATHER: 65° Cloudy / Lt. Rain

MONITORING WELL ID: MW-2 | SAMPLE ID: MW2-ROX-101019

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 54.87 ft btoc
Total Well Depth (btoc): 60.20 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 36.99 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 23.21 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: BAH ~~0.0~~ 0.1 ppm
Wellbore PID/FID Reading: 263.9 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1300	36.99	Clear	Moderate	19.3	1.91	1.186 mS/cm uS/cm	6.86	-103.8	8.30
300	1301	36.99	↓	↓	19.3	1.24	1.189 mS/cm uS/cm	6.87	-108.5	8.64
600	1302	36.99			19.3	0.97	1.188 mS/cm uS/cm	6.88	-111.2	10.17
900	1303	36.99			19.5	0.80	1.187 mS/cm uS/cm	6.90	-114.0	11.63
1200	1304	36.99			19.5	0.77	1.186 mS/cm uS/cm	6.91	-115.6	12.35
1500	1305	36.99			19.5	0.71	1.183 mS/cm uS/cm	6.93	-118.1	12.54
1800	1306	36.99			19.6	0.68	1.181 mS/cm uS/cm	6.94	-120.1	14.70
							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			

Start Time: 1300 | Elapsed Time (min): 6 | Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1306 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10/10/19

SAMPLING DATA

Sample Date: 10/10/19 | 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: EB

VOA Vials, No Headspace ☒ Initials: BH BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/14/19 WEATHER: 65° F Sunny

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-101419

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: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.67 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 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	1051	22.67	Clear	Slight	18.1	2.44	1.092	mS/cm uS/cm	6.87	-130.7	0.00
300	1052	22.66	↓	↓	18.4	1.72	1.097	mS/cm uS/cm	6.89	-137.0	0.00
600	1053	22.66			18.6	1.31	1.097	mS/cm uS/cm	6.90	-141.6	1.83
900	1054	22.66			18.7	1.10	1.097	mS/cm uS/cm	6.91	-144.6	4.27
1200	1055	22.66			18.7	1.02	1.096	mS/cm uS/cm	6.91	-146.6	5.45
1500	1056	22.66			18.8	0.95	1.096	mS/cm uS/cm	6.92	-148.0	6.96
1800	1057	22.66			18.9	0.88	1.096	mS/cm uS/cm	6.92	-149.8	8.25
2100	1058	22.66			19.0	0.83	1.095	mS/cm uS/cm	6.92	-151.0	9.43
2400	1059	22.66			19.0	0.80	1.095	mS/cm uS/cm	6.92	-151.9	10.66
								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			

Start Time: 1051 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1059 Average Purge Rate (mL/min): 300 Date Calibrated: 10/14/19

SAMPLING DATA

Sample Date: 10/14/19 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: BH BB

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell Burleson

DATE: 10/8/19 WEATHER: 60° F Sunny

MONITORING WELL ID: MW-4 SAMPLE ID: MW4 - ROX - 100819

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 50.06 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 55.39 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 34.07 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): 45.06 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 21.32 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

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	0848	34.10	Clear	Moderate	17.9	1.29	1.483 mS/cm uS/cm	6.89	-89.9	17.40
300	0849	34.10			17.9	1.07	1.491 mS/cm uS/cm	6.89	-94.1	14.86
600	0850	34.10			18.0	0.99	1.497 mS/cm uS/cm	6.89	-99.9	14.39
900	0851	34.10			18.2	0.82	1.503 mS/cm uS/cm	6.90	-106.3	11.99
1200	0852	34.10			18.3	0.77	1.504 mS/cm uS/cm	6.90	-109.5	11.45
1500	0853	34.10			18.4	0.72	1.506 mS/cm uS/cm	6.92	-112.1	9.40
1800	0854	34.10			18.5	0.68	1.508 mS/cm uS/cm	6.93	-115.5	8.17
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 0848 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D1011603

Stop Time: 0854 Average Purge Rate (mL/min): 300 Date Calibrated: 10/8/19

SAMPLING DATA

Sample Date: 10/8/19 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: BH 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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/15/19 WEATHER: 55°F Cloudy

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-ROX-101519

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.97 ft btoc
Total Well Depth (btoc): 44.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 22.23 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 33.97 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): 22.07 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: 0.6 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	0909	22.25	Clear	Slight	17.7	1.78	1.274 mS/cm uS/cm	6.75	-114.0	14.02
300	0910	22.25			17.8	1.46	1.272 mS/cm uS/cm	6.78	-125.5	13.56
600	0911	22.25			17.9	1.26	1.270 mS/cm uS/cm	6.80	-132.9	11.97
900	0912	22.25			18.0	1.16	1.270 mS/cm uS/cm	6.81	-136.4	11.64
1200	0913	22.25			18.1	1.07	1.269 mS/cm uS/cm	6.83	-139.9	11.60
1500	0914	22.25			18.1	0.99	1.268 mS/cm uS/cm	6.84	-143.0	13.22
1800	0915	22.25			18.1	0.94	1.269 mS/cm uS/cm	6.85	-145.0	14.91
2100	0916	22.25			18.1	0.90	1.267 mS/cm uS/cm	6.85	-146.5	15.60
							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: 0909 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0916 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/19

SAMPLING DATA

Sample Date: 10/15/19 Sample Time: 0925 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

COMMENTS:

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

Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/10/19 WEATHER: 65°F Cloudy

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A - Rox - 101019

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.85 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 44.18 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 24.39 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.85 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.4 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 19.79 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	0852	24.41	Cloudy	Slight	19.4	1.70	0.792 mS/cm uS/cm	6.48	-29.9	24.91
300	0853	24.41			19.6	1.15	0.792 mS/cm uS/cm	6.66	-75.8	39.21
600	0854	24.41			19.7	0.97	0.794 mS/cm uS/cm	6.70	-92.6	39.02
900	0855	24.41			19.8	0.84	0.797 mS/cm uS/cm	6.74	-105.8	37.66
1200	0856	24.41			19.8	0.77	0.797 mS/cm uS/cm	6.75	-112.9	37.40
1500	0857	24.41			19.9	0.73	0.798 mS/cm uS/cm	6.76	-117.2	38.16
1800	0858	24.41			19.9	0.69	0.798 mS/cm uS/cm	6.77	-121.5	37.42
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0852 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0858 Average Purge Rate (mL/min): 300 Date Calibrated: 10/10/19

SAMPLING DATA

Sample Date: 10/10/19 Sample Time: 0905 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/10/19 WEATHER: 65° Cloudy

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B - ROX - 101019

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 66.55 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 69.38 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 24.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 64.05 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 44.95 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0930	24.47	Clear	Slight	19.6	1.24	0.742	mS/cm uS/cm	7.03	-79.9	2.03
300	0931	24.46			19.6	1.13	0.745	mS/cm uS/cm	7.04	-84.9	1.60
600	0932	24.46			19.7	0.88	0.757	mS/cm uS/cm	7.06	-97.7	0.15
900	0933	24.46			19.8	0.83	0.760	mS/cm uS/cm	7.07	-100.0	0.0
1200	0934	24.46			19.8	0.77	0.770	mS/cm uS/cm	7.07	-102.5	0.0
1500	0935	24.46			19.8	0.71	0.778	mS/cm uS/cm	7.08	-106.1	0.0
1800	0936	24.46			19.9	0.67	0.781	mS/cm uS/cm	7.10	-108.2	0.0
2100	0937	24.46			19.9	0.65	0.784	mS/cm uS/cm	7.09	-109.9	0.0
2400	0938	24.46			19.9	0.62	0.786	mS/cm uS/cm	7.09	-111.7	0.0
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

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

Stop Time: 0938 Average Purge Rate (mL/min): 300 Date Calibrated: 10/10/19

SAMPLING DATA

Sample Date: 10/10/19 Sample Time: 0945 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 BB

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/10/19 WEATHER: 65°F Cloudy

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C-ROX-101019

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): 24.23 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 84.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 66.05 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	1045	24.26	Clear	Slight	19.4	3.16	0.745 mS/cm uS/cm	7.16	-87.9	5.22
300	1046	24.26			19.4	1.76	0.752 mS/cm uS/cm	7.16	-102.9	4.63
600	1047	24.26			19.4	1.33	0.758 mS/cm uS/cm	7.16	-110.4	3.50
900	1048	24.26			19.4	1.10	0.7608 mS/cm uS/cm	7.17	-116.7	2.34
1200	1049	24.26			19.5	0.98	0.773 mS/cm uS/cm	7.17	-120.1	1.30
1500	1050	24.26			19.5	0.89	0.778 mS/cm uS/cm	7.17	-123.4	0.10
1800	1051	24.26			19.5	0.83	0.781 mS/cm uS/cm	7.18	-125.9	0.00
2100	1052	24.26			19.5	0.78	0.783 mS/cm uS/cm	7.18	-127.1	0.00
2400	1053	24.26			19.5	0.75	0.783 mS/cm uS/cm	7.18	-128.4	0.00
							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			

Start Time: 1045 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1053 Average Purge Rate (mL/min): 300 Date Calibrated: 10/10/19

SAMPLING DATA

Sample Date: 10/10/19 Sample Time: 1100 Lab Analysis: VOC, SVOC, PAH

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

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

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Hawell B. Burleson

DATE: 10/10/19 WEATHER: 65°F ~~Sunny~~ BAH Cloudy

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-101019

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): 24.07 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.2 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 85.98 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1011	24.11	Clear	Slight	19.3	2.73	0.871	mS/cm uS/cm	7.07	-97.6	6.87
300	1012	24.11			19.2	1.76	0.892	mS/cm uS/cm	7.09	-108.9	7.21
600	1013	24.11			19.3	1.14	0.911	mS/cm uS/cm	7.11	-119.2	7.49
900	1014	24.11			19.2	1.03	0.922	mS/cm uS/cm	7.11	-122.1	7.61
1200	1015	24.11			19.2	0.86	0.934	mS/cm uS/cm	7.12	-125.7	6.26
1500	1016	24.11			19.2	0.83	0.935	mS/cm uS/cm	7.12	-126.5	5.69
1800	1017	24.11			19.2	0.79	0.937	mS/cm uS/cm	7.12	-127.7	5.29
2100	1018	24.11			19.2	0.75	0.940	mS/cm uS/cm	7.13	-128.9	4.45
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 1011 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1018 Average Purge Rate (mL/min): 300 Date Calibrated: 10/10/19

SAMPLING DATA

Sample Date: 10/10/19 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: NONE

VOA Vials, No Headspace ☒ Initials: BH BB

COMMENTS:

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

Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/8/19 WEATHER: 70°F Sunny

MONITORING WELL ID: MW-7 SAMPLE ID: MW7 - ROX - 100819 ~~AMW~~ BAH 10/8/19

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 47.92 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 52.92 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 36.10 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.4 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 502.8 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 16.82 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

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	1329	36.10	Clear	Moderate	20.1	0.71	1.396	mS/cm uS/cm	6.65	-75.1	20.23
300	1330	36.10			20.1	0.61	1.394	mS/cm uS/cm	6.65	-74.9	22.00
600	1331	36.10			20.1	0.56	1.394	mS/cm uS/cm	6.66	-74.3	23.49
900	1332	36.10			20.2	0.52	1.398	mS/cm uS/cm	6.66	-74.9	23.56
1200	1333	36.10	↓	↓	20.4	0.48	1.400	mS/cm uS/cm	6.66	-75.4	24.55
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1329 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1333 Average Purge Rate (mL/min): 300 Date Calibrated: 10/8/19

SAMPLING DATA

Sample Date: 10/8/19 Sample Time: 1340 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/8/19 WEATHER: 65° F Sunny

MONITORING WELL ID: MW-8 SAMPLE ID: MW8-ROX-100819

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.60 ft btoc
Total Well Depth (btoc): 43.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 26.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 33.60 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 16.69 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.1 ppm
Wellbore PID/FID Reading: 70.5 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	1140	26.94	Clear	Strong	19.1	0.93	1.642 mS/cm uS/cm	6.95	-131.6	6.14
300	1141	26.94	↓	↓	19.1	0.85	1.641 mS/cm uS/cm	6.94	-135.2	7.99
600	1142	26.94			19.2	0.77	1.640 mS/cm uS/cm	6.93	-138.7	8.81
900	1143	26.94			19.3	0.68	1.638 mS/cm uS/cm	6.93	-142.0	10.79
1200	1144	26.94			19.3	0.63	1.638 mS/cm uS/cm	6.93	-144.0	14.83
1500	1145	26.94			19.3	0.61	1.637 mS/cm uS/cm	6.93	-144.9	16.41
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1140 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1145 Average Purge Rate (mL/min): 300 Date Calibrated: 10/8/19

SAMPLING DATA

Sample Date: 10/8/19 Sample Time: 1155 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 BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/14/19 WEATHER: 60° F Sunny

MONITORING WELL ID: MW-9 SAMPLE ID: MW9-BOX-101419

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.04 ft btoc
Total Well Depth (btoc): 56.37 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 38.08 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): 46.04 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 18.29 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0959	38.15	Clear	None	17.2	3.80	1.507 mS/cm uS/cm	6.74	+65.0	22.31
300	1000	38.15	↓	↓	17.3	2.05	1.557 mS/cm uS/cm	6.71	-69.1	21.13
600	1001	38.15			17.4	1.50	1.568 mS/cm uS/cm	6.71	-71.0	14.92
900	1002	38.15			17.5	1.21	1.578 mS/cm uS/cm	6.71	-72.7	13.98
1200	1003	38.15			17.5	1.06	1.588 mS/cm uS/cm	6.71	-74.0	14.00
1500	1004	38.15			17.5	0.94	1.595 mS/cm uS/cm	6.72	-75.5	12.01
1800	1005	38.15			17.5	0.88	1.596 mS/cm uS/cm	6.72	-75.9	11.84
2100	1006	38.15			17.5	0.83	1.598 mS/cm uS/cm	6.72	-76.8	11.36
2400	1007	38.15			17.5	0.79	1.600 mS/cm uS/cm	6.72	-77.3	10.96
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0959 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1007 Average Purge Rate (mL/min): 300 Date Calibrated: 10/14/19

SAMPLING DATA

Sample Date: 10/14/19 Sample Time: 1015 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 BB

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW **PROJECT NUMBER:** 60592794 - 1.03.004 **FIELD PERSONNEL:** B. Howell B. Burleson

DATE: 10/14/19 **WEATHER:** 60°F Sunny

MONITORING WELL ID: MW-10 **SAMPLE ID:** MW10-ROX-101419

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.43 ft btoc
Total Well Depth (btoc): 54.76 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 38.40 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 44.43 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 16.36 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	0913	38.42	Clear	Slight	17.9	1.86	1.072	mS/cm uS/cm	6.85	-114.7	30.48
300	0914	38.42			17.9	1.60	1.071	mS/cm uS/cm	6.86	-117.5	32.00
600	0915	38.42			17.9	1.28	1.068	mS/cm uS/cm	6.88	-122.2	29.86
900	0916	38.42			18.1	1.09	1.067	mS/cm uS/cm	6.89	-126.2	28.12
1200	0917	38.42			18.2	0.99	1.067	mS/cm uS/cm	6.90	-129.1	24.30
1500	0918	38.42			18.1	0.92	1.067	mS/cm uS/cm	6.91	-132.1	21.32
1800	0919	38.42			18.1	0.86	1.066	mS/cm uS/cm	6.92	-134.3	20.30
2100	0920	38.42			18.1	0.82	1.067	mS/cm uS/cm	6.93	-135.6	18.33
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0913 **Elapsed Time (min):** 7 **Water Quality Meter ID & SN:** YSI ProDSS - 19D101603

Stop Time: 0920 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10/14/19

SAMPLING DATA

Sample Date: 10/14/19 **Sample Time:** 0930 **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 BB

COMMENTS:

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

Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Berleson

DATE: 10/4/19 WEATHER: Clear 56F

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX-100419

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): 35.36 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): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 16.63 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)
0 ~300 DB	1021	35.37	Clear	Slight	16.9	5.70	1.216	mS/cm uS/cm	6.74	-97.3	11.24
300 ~600 DB	1022				16.9	3.69	1.269	mS/cm uS/cm	6.79	-62.9	9.69
600 ~900 DB	1023				16.9	2.03	1.282	mS/cm uS/cm	6.83	-50.9	8.72
900 ~1200 DB	1024				17.1	1.49	1.285	mS/cm uS/cm	6.84	-56.9	7.21
1200 ~1500 DB	1025				17.2	1.12	1.287	mS/cm uS/cm	6.84	-57.4	10.78
1500 ~1800 DB	1026				17.2	0.97	1.288	mS/cm uS/cm	6.84	-59.7	6.16
1800 ~2100 DB	1027				17.3	0.84	1.288	mS/cm uS/cm	6.84	-61.9	4.97
2100 ~2400 DB	1028				17.3	0.80	1.288	mS/cm uS/cm	6.84	-63.3	4.73
2400 ~2700 DB	1029				17.3	0.74	1.288	mS/cm uS/cm	6.85	-65.0	3.75
2700 ~3000 DB	1030				17.3	0.69	1.288	mS/cm uS/cm	6.85	-66.0	2.69
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1021 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1030 Average Purge Rate (mL/min): ~300 Date Calibrated: 10/4/19

SAMPLING DATA

Sample Date: 10/4/19 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: N/A

VOA Vials, No Headspace ☒ Initials: JR, BB

COMMENTS:

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

Total Purge Volume: ~~~3000~~ DB 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: J. Ragatz, B. Burleson

DATE: 10/4/19 WEATHER: Clear 64°F

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX-100419

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~46.92' ft btoc
Total Well Depth (btoc): 52.25 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc
Depth to Water (btoc): 35.49 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
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: N/A ft btoc
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: N/A ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 16.76 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0 ~300 BB	1228	35.51	Clear	None	20.1	4.78	0.971 mS/cm uS/cm	6.78	68.1	7.80
300 ~600 BB	1229	35.52			18.8	2.11	0.964 mS/cm uS/cm	6.79	78.0	5.36
600 ~900 BB	1230				18.9	1.16	0.963 mS/cm uS/cm	6.81	83.4	5.35
900 ~1200 BB	1231				19.0	0.96	0.963 mS/cm uS/cm	6.82	84.9	5.69
1200 ~1500 BB	1232				19.0	0.90	0.963 mS/cm uS/cm	6.82	85.5	6.14
1500 ~1800 BB	1233				19.2	0.81	0.965 mS/cm uS/cm	6.82	86.3	6.04
1800 ~2100 BB	1234				19.1	0.74	0.967 mS/cm uS/cm	6.82	87.1	5.44
2100 ~2400 BB	1235				19.2	0.68	0.970 mS/cm uS/cm	6.82	88.0	5.25
2400 ~2700 BB	1236				19.4	0.65	0.972 mS/cm uS/cm	6.82	88.6	5.34
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1228 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1236 Average Purge Rate (mL/min): ~300 Date Calibrated: 10/4/19

SAMPLING DATA

Sample Date: 10/4/19 Sample Time: 1240 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, BB

COMMENTS:

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

BB 2400

Total Purge Volume: ~~~2700~~ mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/9/19 | WEATHER: 70° Sunny

MONITORING WELL ID: MW-13 | SAMPLE ID: MW13 - ROX - 100919

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
Total Well Depth (btoc): 35.05 ft	
Depth to Water (btoc): 21.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 24.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 13.10 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

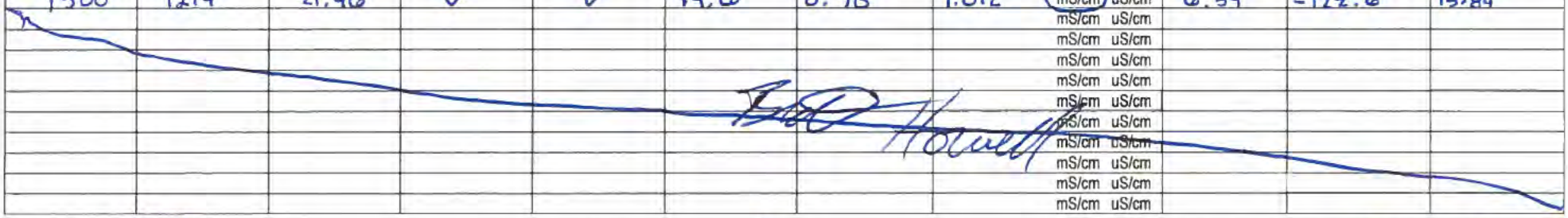
Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.8 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1209	21.97	Clear	Slight	19.5	1.26	1.025 mS/cm uS/cm	6.56	-117.4	11.91
300	1210	21.96	↓	↓	19.6	1.05	1.023 mS/cm uS/cm	6.57	-118.5	13.10
600	1211	21.96			19.5	0.90	1.018 mS/cm uS/cm	6.58	-120.2	13.39
900	1212	21.96			19.5	0.87	1.015 mS/cm uS/cm	6.58	-121.1	~~14.10~~ 14.10
1200	1213	21.96			19.6	0.81	1.014 mS/cm uS/cm	6.59	-121.9	14.27
1500	1214	21.96			19.6	0.70	1.012 mS/cm uS/cm	6.59	-122.6	15.84
							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: 1209 | Elapsed Time (min): 5 | Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1214 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10/9/19

SAMPLING DATA

Sample Date: 10/9/19 | Sample Time: 1220 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

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 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/11/19 | WEATHER: 45° RAIN/Windy

MONITORING WELL ID: MW-14 | SAMPLE ID: MW14-ROX-101119

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): 26.73 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): 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: 86.3 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 17.27 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	0947	26.74	Clear	Moderate	16.2	3.00	0.929 mS/cm uS/cm	6.77	-65.6	4.83
300	0948	↓	↓	↓	16.3	1.82	0.880 mS/cm uS/cm	6.78	-64.9	5.32
600	0949				16.6	1.50	0.877 mS/cm uS/cm	6.79	-73.0	5.68
900	0950				16.9	1.30	0.877 mS/cm uS/cm	6.80	-78.1	4.74
1200	0951	26.74			16.9	1.19	0.874 mS/cm uS/cm	6.81	-83.2	4.41
1500	0952	"			16.9	1.15	0.876 mS/cm uS/cm	6.81	-84.9	3.86
1800	0953	26.74			17.1	1.10	0.877 mS/cm uS/cm	6.81	-86.7	2.88
2100	0954	26.74			17.4	1.01	0.875 mS/cm uS/cm	6.84	-88.9	2.43
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
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							mS/cm uS/cm			

Start Time: 0947 | Elapsed Time (min): 7 | Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0954 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10/11/19

SAMPLING DATA

Sample Date: 10/11/19 | 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: MS MSD

VOA Vials, No Headspace ☒ Initials: BH BB

COMMENTS:

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

Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/7/19 WEATHER: 60°F Sunny

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX-100719

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 42.50 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): 36.86 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 37.50 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 10.89 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0948	36.87	Cloudy	Slight	18.1	1.39	1.258	mS/cm uS/cm	6.77	174.0	90.0
300	0949	36.87	↓	↓	18.3	1.06	1.258	mS/cm uS/cm	6.77	148.9	85.9
600	0950	36.87			18.5	0.99	1.256	mS/cm uS/cm	6.77	140.3	82.1
900	0951	36.87			18.9	0.96	1.257	mS/cm uS/cm	6.78	131.0	83.2
1200	0952	36.87			19.0	0.93	1.259	mS/cm uS/cm	6.78	121.2	75.25
1500	0953	36.87	↓	↓	19.1	0.91	1.258	mS/cm uS/cm	6.78	115.1	69.01
3000	0958	36.87	Cloudy	Slight	19.0	0.83	1.249	mS/cm uS/cm	6.78	97.0	53.34
3300	0959	36.87	↓	↓	19.0	0.83	1.249	mS/cm uS/cm	6.78	95.3	52.01
3600	1000	36.87			19.0	0.83	1.247	mS/cm uS/cm	6.78	93.4	49.52
3900	1001	36.87	↓	↓	19.1	0.82	1.246	mS/cm uS/cm	6.78	90.7	46.41
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0948 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1001 Average Purge Rate (mL/min): 300 Date Calibrated: 10/7/19

SAMPLING DATA

Sample Date: 10/7/19 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: NONE

VOA Vials, No Headspace ☒ Initials: BB BH

COMMENTS:

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

Due to high turbidity after initial 5 minutes of purging, wait 5 minutes before taking readings again.

Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/15/19 WEATHER: 60°F, Cloudy

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-ROX-101519

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.43 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.38 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): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.30 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1123	35.40	Clear	Slight	18.7	1.41	1.350	mS/cm uS/cm	7.15	-102.3	12.47
300	1124	35.40	↓	↓	18.8	1.24	1.356	mS/cm uS/cm	7.14	-105.6	12.61
600	1125	35.40			18.9	1.15	1.363	mS/cm uS/cm	7.13	-107.7	20.06
900	1126	35.40			19.0	1.08	1.367	mS/cm uS/cm	7.12	-109.5	22.28
1200	1127	35.40			19.0	1.04	1.370	mS/cm uS/cm	7.11	-110.7	22.19
1500	1128	35.40			19.1	0.99	1.372	mS/cm uS/cm	7.11	-111.3	20.92
1800	1129	35.40			19.7	0.97	1.374	mS/cm uS/cm	7.10	-111.6	22.53
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
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								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1123 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 19D1016603

Stop Time: 1129 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/19

SAMPLING DATA

Sample Date: 10/15/19 Sample Time: 1135 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BHBB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell Burleson

DATE: 10/9/19 WEATHER: 60°F Sunny

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-100919

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): 23.39 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 44.87 ft 15.88	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	1035	23.43	cloudy	slight	19.0	1.16	0.783	mS/cm uS/cm	6.79	-107.3	78.82
300	1036	23.40			19.0	0.91	0.764	mS/cm uS/cm	6.78	-110.6	68.30
600	1037	23.40			19.2	0.84	0.765	mS/cm uS/cm	6.79	-111.8	65.90
900	1038	23.40			19.2	0.80	0.765	mS/cm uS/cm	6.79	-112.7	63.51
1200	1039	23.40			19.2	0.76	0.785	mS/cm uS/cm	6.78	-113.6	60.55
1500	1040	23.40			19.3	0.72	0.785	mS/cm uS/cm	6.78	-114.5	59.52
1800	1041	23.40			19.3	0.69	0.786	mS/cm uS/cm	6.78	-115.1	61.03
3300	1046	23.40			19.4	0.60	0.788	mS/cm uS/cm	6.79	-119.0	67.69
3600	1047	23.40			19.6	0.59	0.786	mS/cm uS/cm	6.78	-118.1	66.06
3900	1048	23.40			19.9	0.58	0.787	mS/cm uS/cm	6.78	-118.2	68.27
4200	1049	23.40			19.7	0.59	0.787	mS/cm uS/cm	6.78	-119.2	70.53
								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): 14 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1049 Average Purge Rate (mL/min): 300 Date Calibrated: 10/9/19

SAMPLING DATA

Sample Date: 10/9/19 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: BH BB

COMMENTS:

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

Total Purge Volume: 4200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/7/19 WEATHER: 55°F Sunny

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX-100719

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): 36.56 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 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): 13.3 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	0902	36.57	Clear	None	17.7	1.54	1.895	mS/cm uS/cm	6.89	225.4	18.02
300	0903	36.58	↓	↓	17.8	1.33	1.885	mS/cm uS/cm	6.89	221.1	16.62
600	0904	36.58			18.0	1.19	1.879	mS/cm uS/cm	6.90	215.2	16.43
900	0905	36.58			18.1	1.12	1.872	mS/cm uS/cm	6.93	207.8	15.05
1200	0906	36.58			18.1	1.09	1.868	mS/cm uS/cm	6.94	202.8	14.95
1500	0907	36.58			18.2	1.07	1.862	mS/cm uS/cm	6.96	200.0	16.58
1800	0908	36.58			18.2	1.07	1.857	mS/cm uS/cm	6.98	189.1	19.02
								mS/cm uS/cm			
								mS/cm uS/cm			
								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: 0902 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -19D101603

Stop Time: 0908 Average Purge Rate (mL/min): 300 Date Calibrated: 10/7/19

SAMPLING DATA

Sample Date: 10/7/19 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: NONE

VOA Vials, No Headspace ☒ Initials: BB 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 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: B. Howell B. Burkson

DATE: 10/8/19 | WEATHER: 65°F Sunny

MONITORING WELL ID: MW-25 | SAMPLE ID: MW25-ROX-100819

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
Total Well Depth (btoc): 45.84 ft	
Depth to Water (btoc): 31.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 14.66 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: BH 63.1 BH ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	0951	31.20	Clear	Slight	18.7	1.87	1.035	mS/cm uS/cm	6.90	-127.4	3.30
300	0957	31.20	↓	↓	18.7	1.25	1.037	mS/cm uS/cm	6.90	-130.5	3.30
600	0953	31.20			18.7	1.01	1.039	mS/cm uS/cm	6.90	-132.9	3.60
900	0954	31.20			18.7	0.86	1.037	mS/cm uS/cm	6.90	-134.3	3.61
1200	0955	31.20			18.9	0.78	1.035	mS/cm uS/cm	6.91	-135.5	3.34
1500	0956	31.20			19.0	0.72	1.035	mS/cm uS/cm	6.91	-136.6	3.56
1800	0957	31.20			19.0	0.69	1.034	mS/cm uS/cm	6.91	-137.5	3.91
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0951 | Elapsed Time (min): 6 | Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0957 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10/8/19

SAMPLING DATA

Sample Date: 10/8/19 | 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: NONE

VOA Vials, No Headspace ☒ Initials: BH BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/9/19 WEATHER: 60°F Sunny

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-ROX-100919

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.15 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.40 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 33.99 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.41 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	0917	34.00	Clear	NONE	18.3	1.83	0.991	mS/cm uS/cm	6.81	198.4	61.04
300	0918	34.00	↓	↓	18.5	1.18	0.977	mS/cm uS/cm	6.81	186.3	53.64
600	0919	34.00			18.5	1.10	0.976	mS/cm uS/cm	6.81	182.1	49.44
900	0920	34.00			18.6	0.99	0.973	mS/cm uS/cm	6.82	177.0	44.59
1200	0921	34.00			18.9	0.87	0.970	mS/cm uS/cm	6.82	169.1	37.52
1500	0922	34.00			18.9	0.83	0.968	mS/cm uS/cm	6.82	165.5	37.89
1800	0923	34.00			18.9	0.81	0.965	mS/cm uS/cm	6.82	162.6	36.00
								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			

Start Time: 0917 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0923 Average Purge Rate (mL/min): 300 Date Calibrated: 10/9/19

SAMPLING DATA

Sample Date: 10/9/19 Sample Time: 0930 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace: ☒ Initials: BH BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B Howell B. Burleson

DATE: 10/3/19 WEATHER: Cloudy 70°F

MONITORING WELL ID: MW-27 SAMPLE ID: MW27-ROX-100319

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 44.79 ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 50.04 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 36.07 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 39.79 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 13.97 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1225	36.15	Lt. Brown	NONE	18.2	5.45	0.827 mS/cm uS/cm	6.97	207.1	180.77
~~300~~ 1500 BAIL	1230	36.15			18.4	5.30	0.829 mS/cm uS/cm	6.97	211.4	124.00
~~600~~ 3000 BAIL	1235	36.14			18.5	4.93	0.831 mS/cm uS/cm	6.97	218.5	66.40
~~900~~ 4500 BAIL	1240	36.12			19.2	4.69	0.833 mS/cm uS/cm	6.97	225.9	48.32
~~1200~~ BAIL	1241	36.12			19.2	4.67	0.835 mS/cm uS/cm	6.97	226.8	44.45
5100	1242	36.12			19.3	4.65	0.835 mS/cm uS/cm	6.97	227.0	45.81
5400	1243	36.12			19.4	4.62	0.835 mS/cm uS/cm	6.97	227.4	41.54
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1225 Elapsed Time (min): 18 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1243 Average Purge Rate (mL/min): 300 Date Calibrated: 10/2/19

SAMPLING DATA

Sample Date: 10/3/19 Sample Time: 1250 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BH BB

COMMENTS:

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

* Readings every five minutes to start due to high turbidity readings.

Total Purge Volume: 5400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: J. Raggatz, B. Burleson

DATE: 10/4/19 | WEATHER: Clear 58°F

MONITORING WELL ID: MW-28 | SAMPLE ID: MW28-ROX-100419

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): 43.86 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.90 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~39.88 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): N/A ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.96 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)
0 ~~~ JB	1110	35.95	Hazy	Moderate	19.3	4.15	1.657 mS/cm uS/cm	6.78	44.5	39.69
300 ~~~ JB	1111				18.5	8.97	1.648 mS/cm uS/cm	6.69	32.8	31.04
600 ~~~ JB	1112				18.6	8.73	1.648 mS/cm uS/cm	6.69	19.4	7.21
900 ~~~ JB	1113				18.7	8.68	1.649 mS/cm uS/cm	6.70	16.9	19.45
1200 ~~~ JB	1114				18.7	8.62	1.648 mS/cm uS/cm	6.70	7.7	14.21
1500 ~~~ JB	1115				18.8	8.59	1.648 mS/cm uS/cm	6.71	2.1	11.69
1800 ~~~ JB	1116				18.8	8.57	1.648 mS/cm uS/cm	6.71	-3.0	9.01
2100 ~~~ JB	1117				18.7	8.54	1.647 mS/cm uS/cm	6.71	-10.7	7.69
2400 ~~~ JB	1118				18.8	8.53	1.646 mS/cm uS/cm	6.71	-14.1	6.64
2700 ~~~ JB	1119				18.9	8.50	1.647 mS/cm uS/cm	6.71	-19.2	5.49
							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: 1110 | Elapsed Time (min): 9 | Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1119 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 10/4/19

SAMPLING DATA

Sample Date: 10/4/19 | 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: N/A

VOA Vials, No Headspace ☑ Initials: JR, JB

COMMENTS:

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

JB
Total Purge Volume: ~~~3000~~ 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/14/19 WEATHER: 65° F Sunny

MONITORING WELL ID: ROST-3-MW SAMPLE ID: ROST3MW-ROX-101419

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): 35.57 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): 37.81 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: 121.4 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.49 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1252	35.64	Cloudy	Moderate	17.2	2.83	1.610	mS/cm uS/cm	6.47	-65.1	8.23
300	1253	35.64			17.3	1.86	1.626	mS/cm uS/cm	6.46	-68.3	7.35
600	1254	35.64			17.3	1.42	1.629	mS/cm uS/cm	6.46	-71.0	6.77
900	1255	35.64			17.5	1.16	1.624	mS/cm uS/cm	6.46	-73.5	6.21
1200	1256	35.64			17.6	1.04	1.622	mS/cm uS/cm	6.46	-75.0	5.05
1500	1257	35.64			17.7	0.96	1.620	mS/cm uS/cm	6.46	-76.4	4.13
1800	1258	35.64			17.7	0.91	1.621	mS/cm uS/cm	6.46	-77.7	3.52
2100	1259	35.64			17.7	0.83	1.624	mS/cm uS/cm	6.47	-79.5	3.00
2400	1300	35.64			17.7	0.80	1.627	mS/cm uS/cm	6.47	-80.4	1.15
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1252 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1300 Average Purge Rate (mL/min): 300 Date Calibrated: 10/14/19

SAMPLING DATA

Sample Date: 10/14/19 Sample Time: 1310 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 BB

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/14/19 WEATHER: 65° F Sunny

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-101419

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 45.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.97 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.58 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.23 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1156	36.03	Dark	Strong	17.7	1.72	1.388	mS/cm uS/cm	7.13	-126.1	15.96
300	1157	36.03			17.7	1.38	1.404	mS/cm uS/cm	7.12	-135.7	14.83
600	1158	36.03			17.8	1.21	1.424	mS/cm uS/cm	7.12	-144.2	15.96
900	1159	36.03			17.9	1.06	1.436	mS/cm uS/cm	7.12	-151.9	16.00
1200	1200	36.03			17.9	0.97	1.454	mS/cm uS/cm	7.11	-158.4	16.16
1500	1201	36.03			18.0	0.90	1.484	mS/cm uS/cm	7.10	-164.8	15.62
1800	1202	36.03			18.0	0.84	1.517	mS/cm uS/cm	7.09	-169.5	15.35
2100	1203	36.03			18.0	0.80	1.544	mS/cm uS/cm	7.08	-173.1	13.72
2400	1204	36.03			18.1	0.77	1.565	mS/cm uS/cm	7.07	-175.9	13.38
2700	1205	36.03			18.1	0.74	1.584	mS/cm uS/cm	7.06	-178.1	12.01
3000	1206	36.03			18.1	0.72	1.609	mS/cm uS/cm	7.04	-179.7	10.98
3300	1207	36.03			18.1	0.69	1.634	mS/cm uS/cm	7.03	-181.0	9.62
3600	1208	36.03			18.2	0.67	1.651	mS/cm uS/cm	7.01	-182.6	8.58
3900	1209	36.03			18.3	0.65	1.664	mS/cm uS/cm	7.00	-183.5	7.18
4200	1210	36.03			18.2	0.64	1.674	mS/cm uS/cm	7.00	-184.1	6.39
4500	1211	36.03	↓	↓	18.3	0.63	1.681	mS/cm uS/cm	7.00	-184.6	5.87

Start Time: 1156 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1211 Average Purge Rate (mL/min): 300 Date Calibrated: 10/14/19

SAMPLING DATA

Sample Date: 10/14/19 Sample Time: 1220 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 BB

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL Purged until spec. cond. was stable.

Total Purge Volume: 4500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/15/19 WEATHER: 55°F Cloudy

MONITORING WELL ID: ROST-4-PZ(E) SAMPLE ID: ROST4PZE-ROX-101519

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 45.00 ft	
Depth to Water (btoc): 35.01 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 39.75 ft btoc
Depth to LNAPL/DNAPL (btoc): NF ft	
Depth to Top of Screen (btoc): 34.75 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 9.99 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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: 51.6 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	1026	35.05	Clear	Strong	18.9	0.87	2.006	mS/cm uS/cm	6.99	-133.1	0.67
300	1027	35.05	↓	↓	19.0	0.83	2.006	mS/cm uS/cm	6.99	-134.2	1.19
600	1028	35.05			19.0	0.80	2.006	mS/cm uS/cm	7.00	-135.3	1.39
900	1029	35.05			19.0	0.77	2.002	mS/cm uS/cm	7.00	-136.6	1.55
1200	1030	35.05			19.0	0.73	2.000	mS/cm uS/cm	7.00	-137.2	2.33
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1026 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1030 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/19

SAMPLING DATA

Sample Date: 10/15/19 Sample Time: 1040 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

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 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B Burleson

DATE: 10/7/19 WEATHER: 65° Sunny

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG-ROX-100719

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): ~~44.53~~ ft	
Depth to Water (btoc): ~~35.69~~ ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.11 ~~40.60~~ DAH ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 34.28 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): ~~9.84~~ ft 8.84	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: ft btoc

Volume of Flow Through Cell: 320* mL

Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL

Ambient PID/FID Reading: 0.0 ppm

Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1115	35.70	Black	Moderate	20.2	0.73	1.747	mS/cm uS/cm	6.82	-222.1	49.73
300	1116	35.70			20.1	0.65	1.740	mS/cm uS/cm	6.82	-228.9	50.17
600	1117	35.70			20.2	0.61	1.735	mS/cm uS/cm	6.82	-234.1	51.60
900	1118	35.70			20.6	0.54	1.723	mS/cm uS/cm	6.83	-240.2	54.62
1200	1119	35.70			20.4	0.52	1.729	mS/cm uS/cm	6.83	-~~240~~.2	51.21
1500	1120	35.70	Black	Moderate	20.9	0.47	1.721	mS/cm uS/cm	6.83	-238.9	50.01
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1115 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1120 Average Purge Rate (mL/min): 300 Date Calibrated: 10/7/19

SAMPLING DATA

Sample Date: 10/7/19 Sample Time: 1130 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

COMMENTS:

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

Water very dark water (purge), cleaned up upon end of sampling

Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: J. Ragate, B. Burleson

DATE: 10/4/19 | WEATHER: ~~Cloudy~~ AR Clear 50°F

MONITORING WELL ID: P-54 | SAMPLE ID: P54-ROX-100419

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): 63.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.22' 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): 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): 27.78 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) BB	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 ~~200~~	0910	35.22	Clear	None	16.5	5.77	1.110 mS/cm uS/cm	6.57	225.2	2.32
300 ~~600~~ BB	0911				16.8	4.40	1.135 mS/cm uS/cm	6.62	222.3	2.76
600 ~~1000~~ BB	0912				16.9	4.11	1.149 mS/cm uS/cm	6.69	221.0	2.80
900 ~~1400~~ BB	0913				17.0	3.69	1.162 mS/cm uS/cm	6.75	218.6	2.82
1200 ~~1800~~ BB	0914				17.1	3.41	1.189 mS/cm uS/cm	6.77	215.2	2.84
1500 ~~2200~~ BB	0915				17.2	5.90	1.185 mS/cm uS/cm	6.78	213.2	2.70
1800 ~~2600~~ BB	0916				17.3	3.39	1.182 mS/cm uS/cm	6.79	211.5	2.62
2100 ~~3000~~ BB	0917				17.3	3.36	1.181 mS/cm uS/cm	6.81	210.4	2.52
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0910 | Elapsed Time (min): 7min | Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0917 | Average Purge Rate (mL/min): ~300 | Date Calibrated: 10/4/19

SAMPLING DATA

Sample Date: 10/4/19 | 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: MS/MSD

VOA Vials, No Headspace ☑ Initials: AR, BB

COMMENTS:

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

Total Purge Volume: ~~2400~~ BB ~2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/15/19 WEATHER: 60°F Cloudy

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

INITIAL DATA

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL NOT SAMPLED DUE TO THE PRESENCE OF LNAPL During gauging.

Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B Burleson

DATE: 10/15/19 WEATHER: 60°F Cloudy

MONITORING WELL ID: P-57 SAMPLE ID: P57 - ROX-101519

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): 40.18 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): 44.19 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 26.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.01 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	1358	40.78	Clear	Strong	20.7	2.57	0.997 mS/cm uS/cm	6.90	-69.9	8.00
300	1359	40.77			20.7	1.54	0.995 mS/cm uS/cm	6.86	-93.7	8.00
600	1400	40.76			20.9	1.24	0.996 mS/cm uS/cm	6.86	-103.1	0.00
900	1401	40.76			21.0	1.07	0.996 mS/cm uS/cm	6.86	-111.3	0.00
1200	1402	40.76			21.1	0.96	0.995 mS/cm uS/cm	6.87	-116.4	0.00
1500	1403	40.76			21.1	0.85	0.996 mS/cm uS/cm	6.88	-122.1	0.00
1800	1404	40.76			21.2	0.78	0.996 mS/cm uS/cm	6.88	-126.9	0.00
2100	1405	40.76			21.2	0.75	0.996 mS/cm uS/cm	6.89	-129.5	0.00
2400	1406	40.76	↓	↓	21.2	0.71	0.995 mS/cm uS/cm	6.89	-132.0	0.00
							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			

Start Time: 1358 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1406 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/19

SAMPLING DATA

Sample Date: 10/15/19 Sample Time: 1415 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: BH BB

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/15/19 WEATHER: 60°F Cloudy

MONITORING WELL ID: P-58 SAMPLE ID: —

INITIAL DATA

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL NOT SAMPLED DUE TO THE PRESENCE OF LNAPL during gauging.

Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell, B. Burleson

DATE: 10/15/19 WEATHER: 60°F Cloudy

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-101519

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): 40.46 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.2 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 52.91 ft btoc	Wellbore PID/FID Reading: 77.4 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 32.45 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 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	1303	40.49	Clear	Strong	25.4	1.80	1.158	mS/cm uS/cm	6.78	-112.0	0.00
300	1304	40.49	↓	↓	24.9	1.32	1.171	mS/cm uS/cm	6.78	-118.9	0.00
600	1305	40.49			24.7	1.14	1.169	mS/cm uS/cm	6.78	-124.7	0.00
900	1306	40.49			24.7	1.00	1.169	mS/cm uS/cm	6.78	-128.7	0.00
1200	1307	40.49			24.8	0.90	1.169	mS/cm uS/cm	6.78	-132.5	0.00
1500	1308	40.49			24.8	0.82	1.168	mS/cm uS/cm	6.79	-135.5	0.00
1800	1309	40.49			24.8	0.78	1.170	mS/cm uS/cm	6.79	-137.7	0.00
2100	1310	40.49			24.5	0.75	1.168	mS/cm uS/cm	6.79	-139.0	0.00
								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			

Start Time: 1303 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1310 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/19

SAMPLING DATA

Sample Date: 10/15/19 Sample Time: 1320 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 BB

COMMENTS:

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

Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW | PROJECT NUMBER: 60592794 - 1.03.004 | FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/11/19 | WEATHER: 45° RAIN/Windy

MONITORING WELL ID: P-66 | SAMPLE ID: P66 - ROX - 101119

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): 29.52 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.4 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: 54.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 30.20 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1100	29.67	Clear	Strong	15.4	2.64	0.964 mS/cm uS/cm	6.63	-86.4	0.0
300	1101	29.67	↓	↓	16.4	1.56	0.985 mS/cm uS/cm	6.63	-96.3	0.0
600	1102	29.62			17.0	1.37	0.990 mS/cm uS/cm	6.63	-99.0	0.0
900	1103	29.61			17.9	1.16	0.993 mS/cm uS/cm	6.63	-103.6	0.0
1200	1104	29.61			18.5	0.96	0.996 mS/cm uS/cm	6.63	-107.4	0.0
1500	1105	29.61			19.0	0.89	0.999 mS/cm uS/cm	6.63	-108.6	0.0
1800	1106	29.61			19.4	0.87	0.998 mS/cm uS/cm	6.63	-110.7	0.0
2100	1107	29.60	↓	↓	19.7	0.77	0.998 mS/cm uS/cm	6.63	-112.4	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1100 | Elapsed Time (min): 7 | Water Quality Meter ID & SN: YSI ProDSS - 19D1016603

Stop Time: 1107 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10/11/19

SAMPLING DATA

Sample Date: 10/11/19 | 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: BH BB

COMMENTS:

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

Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/15/19 WEATHER: 60° F Cloudy

MONITORING WELL ID: P-68 SAMPLE ID: —

INITIAL DATA

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	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			

	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)

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL NOT SAMPLED DUE TO THE PRESENCE OF LNAPL during gauging.

Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q19 GW PROJECT NUMBER: 60592794 - 1.03.004 FIELD PERSONNEL: B. Howell B. Burleson

DATE: 10/9/19 WEATHER: 70° F Sunny

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-100919

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): 20.46 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 23.01 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 12.85 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT TOTAL WELL DEPTH -2 FT: — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	1256	20.51	GRAY/Cloudy	Slight	21.5	1.25	0.804	mS/cm uS/cm	6.68	-138.3	302.1
3000	1306	20.46	↓	↓	21.7	0.53	0.818	mS/cm uS/cm	6.73	-148.2	112.80
6000	1316	20.49	↓	↓	21.9	0.45	0.840	mS/cm uS/cm	6.74	-150.4	100.12
9000	1326	20.46	Clear	↓	22.8	0.84	0.854	mS/cm uS/cm	6.73	-141.1	33.60
9300	1327	20.46	↓	↓	22.7	0.63	0.861	mS/cm uS/cm	6.73	-143.7	33.05
9600	1328	20.46	↓	↓	22.5	0.57	0.860	mS/cm uS/cm	6.73	-145.3	32.00
9900	1329	20.46	↓	↓	22.6	0.53	0.861	mS/cm uS/cm	6.73	-146.9	31.85
10200	1330	20.46	↓	↓	22.6	0.49	0.863	mS/cm uS/cm	6.73	-147.9	32.44
								mS/cm uS/cm			
								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: 1256 Elapsed Time (min): 34 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1330 Average Purge Rate (mL/min): 300 Date Calibrated: 10/9/19

SAMPLING DATA

Sample Date: 10/9/19 Sample Time: 1335 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BH BB

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL Turbidity extremely high. Take readings in 10 minute intervals until values are lower / in range.

Total Purge Volume: 10200 mL

Appendix B

Data Review Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177518-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/21/2019

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

Sample Identification	Sample Identification
TB-ROX-100319-8011	TB-ROX-100319-8260
MW27-ROX-100319-EB	MW27-ROX-100319

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 MW27-ROX-100319-EB and in the SVOC method blank. Several SVOC LCS/LCD recoveries and/or SVOC LCS/LCSD RPDs were outside evaluation criteria. Several PAH surrogate recoveries were outside criteria in sample MW27-ROX-100319 and several QC samples. The continuing calibration verification for benzyl alcohol 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
MW27-ROX-100319-EB	SVOCs	bis(2-Ethylhexyl) phthalate	15 µg/L
MB 400-460952/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	12.5 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 400-460952/4-A/5-A	SVOCs	Benzenethiol	**1/2**	**40**	10-120/30
LCS/LCSD 400-460952/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	80/121	**40**	48-150/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-460952/4-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.

Sample ID	Parameter	Analyte	Qualification
MW27-ROX-100319	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW27-ROX-100319-EB	PAHs	Terphenyl-d_{14}	**166**	33-138
MW27-ROX-100319-EB	PAHs	2-Fluorobiphenyl	**126**	15-122
MW27-ROX-100319	PAHs	Terphenyl-d_{14}	**248**	33-138
MW27-ROX-100319	PAHs	2-Fluorobiphenyl	**130**	15-122
MB 400-460952/1-A	PAHs	Terphenyl-d_{14}	**229**	33-138

Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Method blank MB 400-460952/1-A and equipment blank MW27-ROX-100319-EB are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for benzyl alcohol was below acceptance criteria and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW27-ROX-100319	SVOCs	Benzyl alcohol	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-177518-1
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:
10/28/2019 1:47:52 PM

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

Reviewed 11/21/19 LR

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Job ID: 400-177518-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177518-1

Comments
No additional comments.

Receipt
The samples were received on 10/4/2019 9:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 4.7° C, 4.8° C and 4.9° C.

GC/MS VOA
Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-100319-8260 (400-177518-2), MW27-ROX-100319-EB (400-177518-3), MW27-ROX-100319 (400-177518-4) and TRIP BLANK (400-177518-5). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-460952 and analytical batch 400-462116 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-460952 and analytical batch 400-462116 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-460952 and analytical batch 400-462116 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462116 recovered outside acceptance criteria, low biased, for Benzyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The method blank for preparation batch 400-460952 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). The samples associated with this method blank were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples were not performed. The following samples are impacted: MW27-ROX-100319 (400-177518-4) and (MB 400-460952/1-A).

Method 8270D LL: Surrogate recovery for the following samples were outside the upper control limit: MW27-ROX-100319-EB (400-177518-3), MW27-ROX-100319 (400-177518-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-460952/1-A). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-462131 recovered above the upper control limit for Pyrene and Fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Due to the lab contamination, bis(2-ethylhexyl) phthalate was detected above the reporting limit (RL) in the method blank as well as in the following sample: MW27-ROX-100319-EB (400-177518-3).

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

Job ID: 400-177518-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-460564 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: 400-177518-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177518-1	TB-ROX-100319-8011	Water	10/03/19 00:00	10/04/19 09:23	
400-177518-2	TB-ROX-100319-8260	Water	10/03/19 00:00	10/04/19 09:23	
400-177518-3	MW27-ROX-100319-EB	Water	10/03/19 11:00	10/04/19 09:23	
400-177518-4	MW27-ROX-100319	Water	10/03/19 12:50	10/04/19 09:23	

Detection Summary

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

Job ID: 400-177518-1

Client Sample ID: TB-ROX-100319-8011 — Lab Sample ID: 400-177518-1

No Detections.

Client Sample ID: TB-ROX-100319-8260 — Lab Sample ID: 400-177518-2

No Detections.

Client Sample ID: MW27-ROX-100319-EB — Lab Sample ID: 400-177518-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	15	B	9.5	4.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW27-ROX-100319 — Lab Sample ID: 400-177518-4

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-177518-1

Client Sample ID: TB-ROX-100319-8011
Date Collected: 10/03/19 00:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/08/19 09:00	10/08/19 15:09	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/08/19 09:00	10/08/19 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*10/08/19 09:00*	*10/08/19 15:09*	*1*

Client Sample ID: TB-ROX-100319-8260
Date Collected: 10/03/19 00:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-2
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			10/16/19 04:19	1
Acrolein	ND		20	10	ug/L			10/16/19 04:19	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/19 04:19	1
Benzene	ND		1.0	0.38	ug/L			10/16/19 04:19	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/19 04:19	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/19 04:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Bromoform	ND		5.0	0.71	ug/L			10/16/19 04:19	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/19 04:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/19 04:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/19 04:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/19 04:19	1
Chloroform	ND		1.0	0.60	ug/L			10/16/19 04:19	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/16/19 04:19	1
Chloromethane	ND		1.0	0.83	ug/L			10/16/19 04:19	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 04:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/19 04:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/19 04:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/19 04:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/19 04:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/19 04:19	1
2-Hexanone	ND		25	3.1	ug/L			10/16/19 04:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/19 04:19	1
Methylene bromide	ND		5.0	0.59	ug/L			10/16/19 04:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/19 04:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/19 04:19	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/16/19 04:19	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/16/19 04:19	1
Naphthalene	ND		1.0	1.0	ug/L			10/16/19 04:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/19 04:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/19 04:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/19 04:19	1
o-Xylene	ND		5.0	0.60	ug/L			10/16/19 04:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/19 04:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/19 04:19	1

Client Sample ID: TB-ROX-100319-8260
Date Collected: 10/03/19 00:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-2
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			10/16/19 04:19	1
Styrene	ND		1.0	1.0	ug/L			10/16/19 04:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/19 04:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/16/19 04:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/16/19 04:19	1
Toluene	ND		1.0	0.41	ug/L			10/16/19 04:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 04:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/16/19 04:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/19 04:19	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/16/19 04:19	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/16/19 04:19	1
Trichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/16/19 04:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/19 04:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/19 04:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/19 04:19	1
Vinyl acetate	ND		25	2.0	ug/L			10/16/19 04:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/19 04:19	1
Xylenes, Total	ND		10	1.6	ug/L			10/16/19 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/16/19 04:19*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/16/19 04:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/16/19 04:19*	*1*

Client Sample ID: MW27-ROX-100319-EB
Date Collected: 10/03/19 11:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-3
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			10/16/19 04:45	1
Acrolein	ND		20	10	ug/L			10/16/19 04:45	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/19 04:45	1
Benzene	ND		1.0	0.38	ug/L			10/16/19 04:45	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/19 04:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/19 04:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Bromoform	ND		5.0	0.71	ug/L			10/16/19 04:45	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/19 04:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/19 04:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/19 04:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/19 04:45	1
Chloroform	ND		1.0	0.60	ug/L			10/16/19 04:45	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/16/19 04:45	1
Chloromethane	ND		1.0	0.83	ug/L			10/16/19 04:45	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 04:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/19 04:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/19 04:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/19 04:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/19 04:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/19 04:45	1
2-Hexanone	ND		25	3.1	ug/L			10/16/19 04:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/19 04:45	1
Methylene bromide	ND		5.0	0.59	ug/L			10/16/19 04:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/19 04:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/19 04:45	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/16/19 04:45	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/16/19 04:45	1
Naphthalene	ND		1.0	1.0	ug/L			10/16/19 04:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/19 04:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/19 04:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/19 04:45	1
o-Xylene	ND		5.0	0.60	ug/L			10/16/19 04:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/19 04:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/19 04:45	1

Client Sample ID: MW27-ROX-100319-EB
Date Collected: 10/03/19 11:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-3
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			10/16/19 04:45	1
Styrene	ND		1.0	1.0	ug/L			10/16/19 04:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/19 04:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/16/19 04:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/16/19 04:45	1
Toluene	ND		1.0	0.41	ug/L			10/16/19 04:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 04:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/16/19 04:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/19 04:45	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/16/19 04:45	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/16/19 04:45	1
Trichloroethene	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/16/19 04:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/19 04:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/19 04:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/19 04:45	1
Vinyl acetate	ND		25	2.0	ug/L			10/16/19 04:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/19 04:45	1
Xylenes, Total	ND		10	1.6	ug/L			10/16/19 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/16/19 04:45*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*10/16/19 04:45*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/16/19 04:45*	*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		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
Anthracene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Chrysene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Fluoranthene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
Fluorene	ND		0.19	0.020	ug/L		10/10/19 10:33	10/18/19 15:11	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:11	1
Phenanthrene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
Pyrene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*166*	*X*	*33 - 138*	*10/10/19 10:33*	*10/18/19 15:11*	*1*
2-Fluorobiphenyl	*126*	*X*	*15 - 122*	*10/10/19 10:33*	*10/18/19 15:11*	*1*

Client Sample ID: MW27-ROX-100319-EB
Date Collected: 10/03/19 11:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	126		19 - 130	10/10/19 10:33	10/18/19 15:11	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		10/10/19 10:33	10/18/19 13:34	1
Benzenethiol	ND	*	9.5	1.6	ug/L		10/10/19 10:33	10/18/19 13:34	1
Benzoic acid	ND		28	6.9	ug/L		10/10/19 10:33	10/18/19 13:34	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/10/19 10:33	10/18/19 13:34	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/10/19 10:33	10/18/19 13:34	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/10/19 10:33	10/18/19 13:34	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/10/19 10:33	10/18/19 13:34	1
Bis(2-ethylhexyl) phthalate	15	B	9.5	4.7	ug/L		10/10/19 10:33	10/18/19 13:34	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/10/19 10:33	10/18/19 13:34	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/10/19 10:33	10/18/19 13:34	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/10/19 10:33	10/18/19 13:34	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/10/19 10:33	10/18/19 13:34	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/10/19 10:33	10/18/19 13:34	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/10/19 10:33	10/18/19 13:34	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/10/19 10:33	10/18/19 13:34	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		10/10/19 10:33	10/18/19 13:34	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/10/19 10:33	10/18/19 13:34	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		10/10/19 10:33	10/18/19 13:34	1
Diethyl phthalate	ND		9.5	0.66	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/10/19 10:33	10/18/19 13:34	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/10/19 10:33	10/18/19 13:34	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/10/19 10:33	10/18/19 13:34	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/10/19 10:33	10/18/19 13:34	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/10/19 10:33	10/18/19 13:34	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/10/19 10:33	10/18/19 13:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/10/19 10:33	10/18/19 13:34	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/10/19 10:33	10/18/19 13:34	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/10/19 10:33	10/18/19 13:34	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/10/19 10:33	10/18/19 13:34	1
Indene	ND		9.5	0.95	ug/L		10/10/19 10:33	10/18/19 13:34	1
Isophorone	ND		9.5	0.54	ug/L		10/10/19 10:33	10/18/19 13:34	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/10/19 10:33	10/18/19 13:34	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/10/19 10:33	10/18/19 13:34	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/10/19 10:33	10/18/19 13:34	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/10/19 10:33	10/18/19 13:34	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/10/19 10:33	10/18/19 13:34	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/10/19 10:33	10/18/19 13:34	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/10/19 10:33	10/18/19 13:34	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/10/19 10:33	10/18/19 13:34	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/10/19 10:33	10/18/19 13:34	1

Client Sample ID: MW27-ROX-100319-EB
Date Collected: 10/03/19 11:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/10/19 10:33	10/18/19 13:34	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/10/19 10:33	10/18/19 13:34	1
Pentachlorophenol	ND		19	1.7	ug/L		10/10/19 10:33	10/18/19 13:34	1
Phenol	ND		9.5	2.5	ug/L		10/10/19 10:33	10/18/19 13:34	1
Pyridine	ND		9.5	3.0	ug/L		10/10/19 10:33	10/18/19 13:34	1
Quinoline	ND		9.5	5.7	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/10/19 10:33	10/18/19 13:34	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/10/19 10:33	10/18/19 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*34 - 120*	*10/10/19 10:33*	*10/18/19 13:34*	*1*
2-Fluorophenol	*53*		*10 - 120*	*10/10/19 10:33*	*10/18/19 13:34*	*1*
Nitrobenzene-d5	*77*		*27 - 120*	*10/10/19 10:33*	*10/18/19 13:34*	*1*
Phenol-d5	*67*		*10 - 120*	*10/10/19 10:33*	*10/18/19 13:34*	*1*
Terphenyl-d14	*75*		*53 - 125*	*10/10/19 10:33*	*10/18/19 13:34*	*1*
2,4,6-Tribromophenol	*61*		*15 - 135*	*10/10/19 10:33*	*10/18/19 13:34*	*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		0.028	0.0051	ug/L		10/08/19 09:00	10/08/19 15:32	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		10/08/19 09:00	10/08/19 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*10/08/19 09:00*	*10/08/19 15:32*	*1*

Client Sample ID: MW27-ROX-100319
Date Collected: 10/03/19 12:50
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-4
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			10/16/19 05:11	1
Acrolein	ND		20	10	ug/L			10/16/19 05:11	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/19 05:11	1
Benzene	ND		1.0	0.38	ug/L			10/16/19 05:11	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/19 05:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/19 05:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Bromoform	ND		5.0	0.71	ug/L			10/16/19 05:11	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/19 05:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/19 05:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/19 05:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/19 05:11	1
Chloroform	ND		1.0	0.60	ug/L			10/16/19 05:11	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/16/19 05:11	1
Chloromethane	ND		1.0	0.83	ug/L			10/16/19 05:11	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 05:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/19 05:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/19 05:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/19 05:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/19 05:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/19 05:11	1
2-Hexanone	ND		25	3.1	ug/L			10/16/19 05:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/19 05:11	1
Methylene bromide	ND		5.0	0.59	ug/L			10/16/19 05:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/19 05:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/19 05:11	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/16/19 05:11	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/16/19 05:11	1
Naphthalene	ND		1.0	1.0	ug/L			10/16/19 05:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/19 05:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/19 05:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/19 05:11	1
o-Xylene	ND		5.0	0.60	ug/L			10/16/19 05:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/19 05:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/19 05:11	1

Client Sample ID: MW27-ROX-100319
Date Collected: 10/03/19 12:50
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-4
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			10/16/19 05:11	1
Styrene	ND		1.0	1.0	ug/L			10/16/19 05:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/19 05:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/16/19 05:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/16/19 05:11	1
Toluene	ND		1.0	0.41	ug/L			10/16/19 05:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 05:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/16/19 05:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/19 05:11	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/16/19 05:11	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/16/19 05:11	1
Trichloroethene	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/16/19 05:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/19 05:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/19 05:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/19 05:11	1
Vinyl acetate	ND		25	2.0	ug/L			10/16/19 05:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/19 05:11	1
Xylenes, Total	ND		10	1.6	ug/L			10/16/19 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/16/19 05:11*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/16/19 05:11*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/16/19 05:11*	*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		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
Anthracene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Chrysene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Fluoranthene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
Fluorene	ND		0.19	0.020	ug/L		10/10/19 10:33	10/18/19 15:26	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/10/19 10:33	10/18/19 15:26	1
Phenanthrene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
Pyrene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 10:33	10/18/19 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*248*	*X*	*33 - 138*	*10/10/19 10:33*	*10/18/19 15:26*	*1*
2-Fluorobiphenyl	*130*	*X*	*15 - 122*	*10/10/19 10:33*	*10/18/19 15:26*	*1*

Client Sample ID: MW27-ROX-100319
Date Collected: 10/03/19 12:50
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	112		19 - 130	10/10/19 10:33	10/18/19 15:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		10/10/19 10:33	10/18/19 14:00	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/10/19 10:33	10/18/19 14:00	1
Benzoic acid	ND		29	7.0	ug/L		10/10/19 10:33	10/18/19 14:00	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/10/19 10:33	10/18/19 14:00	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/10/19 10:33	10/18/19 14:00	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/10/19 10:33	10/18/19 14:00	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/10/19 10:33	10/18/19 14:00	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		10/10/19 10:33	10/18/19 14:00	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/10/19 10:33	10/18/19 14:00	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/10/19 10:33	10/18/19 14:00	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/10/19 10:33	10/18/19 14:00	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/10/19 10:33	10/18/19 14:00	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/10/19 10:33	10/18/19 14:00	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/10/19 10:33	10/18/19 14:00	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/10/19 10:33	10/18/19 14:00	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/10/19 10:33	10/18/19 14:00	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/10/19 10:33	10/18/19 14:00	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/10/19 10:33	10/18/19 14:00	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/10/19 10:33	10/18/19 14:00	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		10/10/19 10:33	10/18/19 14:00	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/10/19 10:33	10/18/19 14:00	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 10:33	10/18/19 14:00	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/10/19 10:33	10/18/19 14:00	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/10/19 10:33	10/18/19 14:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/10/19 10:33	10/18/19 14:00	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/10/19 10:33	10/18/19 14:00	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/10/19 10:33	10/18/19 14:00	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/10/19 10:33	10/18/19 14:00	1
Indene	ND		9.6	0.96	ug/L		10/10/19 10:33	10/18/19 14:00	1
Isophorone	ND		9.6	0.55	ug/L		10/10/19 10:33	10/18/19 14:00	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/10/19 10:33	10/18/19 14:00	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/10/19 10:33	10/18/19 14:00	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/10/19 10:33	10/18/19 14:00	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/10/19 10:33	10/18/19 14:00	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/10/19 10:33	10/18/19 14:00	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/10/19 10:33	10/18/19 14:00	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/10/19 10:33	10/18/19 14:00	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/10/19 10:33	10/18/19 14:00	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/10/19 10:33	10/18/19 14:00	1

Client Sample ID: MW27-ROX-100319
Date Collected: 10/03/19 12:50
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/10/19 10:33	10/18/19 14:00	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/10/19 10:33	10/18/19 14:00	1
Pentachlorophenol	ND		19	1.7	ug/L		10/10/19 10:33	10/18/19 14:00	1
Phenol	ND		9.6	2.5	ug/L		10/10/19 10:33	10/18/19 14:00	1
Pyridine	ND		9.6	3.1	ug/L		10/10/19 10:33	10/18/19 14:00	1
Quinoline	ND		9.6	5.8	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/10/19 10:33	10/18/19 14:00	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/10/19 10:33	10/18/19 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 120*	*10/10/19 10:33*	*10/18/19 14:00*	*1*
2-Fluorophenol	*41*		*10 - 120*	*10/10/19 10:33*	*10/18/19 14:00*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*10/10/19 10:33*	*10/18/19 14:00*	*1*
Phenol-d5	*61*		*10 - 120*	*10/10/19 10:33*	*10/18/19 14:00*	*1*
Terphenyl-d14	*85*		*53 - 125*	*10/10/19 10:33*	*10/18/19 14:00*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*10/10/19 10:33*	*10/18/19 14:00*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/08/19 09:00	10/08/19 15:56	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/08/19 09:00	10/08/19 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*10/08/19 09:00*	*10/08/19 15:56*	*1*

Qualifiers

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: 400-177518-1

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)
400-177518-2	TB-ROX-100319-8260	94	94	98
400-177518-3	MW27-ROX-100319-EB	94	95	98
400-177518-4	MW27-ROX-100319	93	94	97
LCS 400-461683/1002	Lab Control Sample	94	93	98
MB 400-461683/4	Method Blank	93	93	100

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-177518-3	MW27-ROX-100319-EB	80	53	77	67	75	61
400-177518-4	MW27-ROX-100319	83	41	70	61	85	65
LCS 400-460952/2-A	Lab Control Sample	83	50	82	73	80	74
LCS 400-460952/4-A	Lab Control Sample	86	51	78	73	87	72
LCSD 400-460952/3-A	Lab Control Sample Dup	84	54	83	73	90	78
LCSD 400-460952/5-A	Lab Control Sample Dup	75	63	71	67	82	65
MB 400-460952/1-A	Method Blank	73	51	70	66	84	69

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)
400-177518-3	MW27-ROX-100319-EB	166 X	126 X	126
400-177518-4	MW27-ROX-100319	248 X	130 X	112
LCS 400-460952/2-A	Lab Control Sample	119	82	75
LCSD 400-460952/3-A	Lab Control Sample Dup	125	85	77
MB 400-460952/1-A	Method Blank	229 X	107	120

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-177518-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-177518-1	TB-ROX-100319-8011	84
400-177518-3	MW27-ROX-100319-EB	90
400-177518-4	MW27-ROX-100319	97
LCS 400-460502/2-A	Lab Control Sample	91
MB 400-460502/1-A	Method Blank	93

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177518-1

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: 400-177518-1

Client Sample ID: TB-ROX-100319-8011

Date Collected: 10/03/19 00:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.7 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 15:09	KLR	TAL PEN

Client Sample ID: TB-ROX-100319-8260

Date Collected: 10/03/19 00:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-2
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	461683	10/16/19 04:19	RS	TAL PEN

Client Sample ID: MW27-ROX-100319-EB

Date Collected: 10/03/19 11:00
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-3
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	461683	10/16/19 04:45	RS	TAL PEN
Total/NA	Prep	3520C			1053.4 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 13:34	VC1	TAL PEN
Total/NA	Prep	3520C			1053.4 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 15:11	DS	TAL PEN
Total/NA	Prep	8011			37.4 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 15:32	KLR	TAL PEN

Client Sample ID: MW27-ROX-100319

Date Collected: 10/03/19 12:50
Date Received: 10/04/19 09:23

Lab Sample ID: 400-177518-4
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	461683	10/16/19 05:11	RS	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 14:00	VC1	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 15:26	DS	TAL PEN
Total/NA	Prep	8011			36.4 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 15:56	KLR	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-460502/1-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	460502	10/08/19 08:59	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 13:14	KLR	TAL PEN

Lab Chronicle

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

Job ID: 400-177518-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-460952/1-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 11:28	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 14:23	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-461683/4
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	461683	10/15/19 21:24	RS	TAL PEN

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

Lab Sample ID: LCS 400-460502/2-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	460502	10/08/19 08:59	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 13:37	KLR	TAL PEN

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

Lab Sample ID: LCS 400-460952/2-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 11:53	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462131	10/18/19 14:39	DS	TAL PEN

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

Lab Sample ID: LCS 400-460952/4-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 12:44	VC1	TAL PEN

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

Lab Sample ID: LCS 400-461683/1002
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	461683	10/15/19 20:23	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-177518-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-460952/3-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 12:19	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462131	10/18/19 14:55	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-460952/5-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 13:09	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: 400-177518-1

GC/MS VOA

Analysis Batch: 461683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177518-2	TB-ROX-100319-8260	Total/NA	Water	8260B	
400-177518-3	MW27-ROX-100319-EB	Total/NA	Water	8260B	
400-177518-4	MW27-ROX-100319	Total/NA	Water	8260B	
MB 400-461683/4	Method Blank	Total/NA	Water	8260B	
LCS 400-461683/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 460952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177518-3	MW27-ROX-100319-EB	Total/NA	Water	3520C	
400-177518-4	MW27-ROX-100319	Total/NA	Water	3520C	
MB 400-460952/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-460952/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-460952/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-460952/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-460952/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177518-3	MW27-ROX-100319-EB	Total/NA	Water	8270D	460952
400-177518-4	MW27-ROX-100319	Total/NA	Water	8270D	460952
MB 400-460952/1-A	Method Blank	Total/NA	Water	8270D	460952
LCS 400-460952/2-A	Lab Control Sample	Total/NA	Water	8270D	460952
LCS 400-460952/4-A	Lab Control Sample	Total/NA	Water	8270D	460952
LCSD 400-460952/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	460952
LCSD 400-460952/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	460952

Analysis Batch: 462131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177518-3	MW27-ROX-100319-EB	Total/NA	Water	8270D LL	460952
400-177518-4	MW27-ROX-100319	Total/NA	Water	8270D LL	460952
MB 400-460952/1-A	Method Blank	Total/NA	Water	8270D LL	460952
LCS 400-460952/2-A	Lab Control Sample	Total/NA	Water	8270D LL	460952
LCSD 400-460952/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	460952

GC Semi VOA

Prep Batch: 460502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177518-1	TB-ROX-100319-8011	Total/NA	Water	8011	
400-177518-3	MW27-ROX-100319-EB	Total/NA	Water	8011	
400-177518-4	MW27-ROX-100319	Total/NA	Water	8011	
MB 400-460502/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-460502/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 460564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177518-1	TB-ROX-100319-8011	Total/NA	Water	8011	460502
400-177518-3	MW27-ROX-100319-EB	Total/NA	Water	8011	460502
400-177518-4	MW27-ROX-100319	Total/NA	Water	8011	460502
MB 400-460502/1-A	Method Blank	Total/NA	Water	8011	460502

GC Semi VOA (Continued)

Analysis Batch: 460564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-460502/2-A	Lab Control Sample	Total/NA	Water	8011	460502

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

Lab Sample ID: MB 400-461683/4
Matrix: Water
Analysis Batch: 461683

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/15/19 21:24	1
Acrolein	ND		20	10	ug/L			10/15/19 21:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/15/19 21:24	1
Benzene	ND		1.0	0.38	ug/L			10/15/19 21:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/15/19 21:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/15/19 21:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Bromoform	ND		5.0	0.71	ug/L			10/15/19 21:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/15/19 21:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/15/19 21:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/15/19 21:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/15/19 21:24	1
Chloroform	ND		1.0	0.60	ug/L			10/15/19 21:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/15/19 21:24	1
Chloromethane	ND		1.0	0.83	ug/L			10/15/19 21:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/15/19 21:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/15/19 21:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/15/19 21:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/15/19 21:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/15/19 21:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/15/19 21:24	1
2-Hexanone	ND		25	3.1	ug/L			10/15/19 21:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/15/19 21:24	1
Methylene bromide	ND		5.0	0.59	ug/L			10/15/19 21:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/15/19 21:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/15/19 21:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/15/19 21:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/15/19 21:24	1
Naphthalene	ND		1.0	1.0	ug/L			10/15/19 21:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/15/19 21:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/15/19 21:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/15/19 21:24	1
o-Xylene	ND		5.0	0.60	ug/L			10/15/19 21:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/15/19 21:24	1

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

Lab Sample ID: MB 400-461683/4
Matrix: Water
Analysis Batch: 461683

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/15/19 21:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/15/19 21:24	1
Styrene	ND		1.0	1.0	ug/L			10/15/19 21:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/15/19 21:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/15/19 21:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/15/19 21:24	1
Toluene	ND		1.0	0.41	ug/L			10/15/19 21:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/15/19 21:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/15/19 21:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/15/19 21:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/15/19 21:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/15/19 21:24	1
Trichloroethene	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/15/19 21:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/15/19 21:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/15/19 21:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/15/19 21:24	1
Vinyl acetate	ND		25	2.0	ug/L			10/15/19 21:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/15/19 21:24	1
Xylenes, Total	ND		10	1.6	ug/L			10/15/19 21:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/15/19 21:24*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*10/15/19 21:24*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/15/19 21:24*	*1*

Lab Sample ID: LCS 400-461683/1002
Matrix: Water
Analysis Batch: 461683

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	224		ug/L		112	43 - 160
Acrolein	500	475		ug/L		95	38 - 160
Acrylonitrile	500	487		ug/L		97	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	47.8		ug/L		96	70 - 132
Bromochloromethane	50.0	46.1		ug/L		92	70 - 130
Bromodichloromethane	50.0	40.6		ug/L		81	67 - 133
Bromoform	50.0	45.8		ug/L		92	57 - 140
Bromomethane	50.0	39.8		ug/L		80	10 - 160
2-Butanone (MEK)	200	249		ug/L		124	61 - 145
Carbon disulfide	50.0	43.7		ug/L		87	61 - 137
Carbon tetrachloride	50.0	35.7		ug/L		71	61 - 137
Chlorobenzene	50.0	47.5		ug/L		95	70 - 130
Dibromochloromethane	50.0	43.8		ug/L		88	67 - 135
Chloroethane	50.0	45.8		ug/L		92	55 - 141

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

Lab Sample ID: LCS 400-461683/1002
Matrix: Water
Analysis Batch: 461683

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	44.3		ug/L		89	10 - 160
Chloroform	50.0	41.2		ug/L		82	69 - 130
1-Chlorohexane	50.0	44.5		ug/L		89	69 - 130
Chloromethane	50.0	47.2		ug/L		94	58 - 137
cis-1,2-Dichloroethene	50.0	43.0		ug/L		86	68 - 130
cis-1,3-Dichloropropene	50.0	42.3		ug/L		85	69 - 132
1,2-Dichlorobenzene	50.0	47.0		ug/L		94	67 - 130
1,3-Dichlorobenzene	50.0	47.6		ug/L		95	70 - 130
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 130
Dichlorodifluoromethane	50.0	35.5		ug/L		71	41 - 146
1,1-Dichloroethane	50.0	43.1		ug/L		86	70 - 130
1,2-Dichloroethane	50.0	39.3		ug/L		79	69 - 130
1,1-Dichloroethene	50.0	46.2		ug/L		92	63 - 134
1,2-Dichloropropane	50.0	45.1		ug/L		90	70 - 130
1,3-Dichloropropane	50.0	45.7		ug/L		91	70 - 130
2,2-Dichloropropane	50.0	37.8		ug/L		76	52 - 135
1,1-Dichloropropene	50.0	42.6		ug/L		85	70 - 130
Ethylbenzene	50.0	46.6		ug/L		93	70 - 130
Ethyl methacrylate	50.0	46.4		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	49.3		ug/L		99	53 - 140
2-Hexanone	200	218		ug/L		109	65 - 137
Isopropylbenzene	50.0	47.3		ug/L		95	70 - 130
Methylene bromide	50.0	43.5		ug/L		87	70 - 130
Methylene Chloride	50.0	46.4		ug/L		93	66 - 135
4-Methyl-2-pentanone (MIBK)	200	196		ug/L		98	69 - 138
Methyl tert-butyl ether	50.0	42.7		ug/L		85	66 - 130
m-Xylene & p-Xylene	50.0	46.7		ug/L		93	70 - 130
Naphthalene	50.0	47.9		ug/L		96	47 - 149
n-Butylbenzene	50.0	45.6		ug/L		91	67 - 130
N-Propylbenzene	50.0	45.5		ug/L		91	70 - 130
o-Chlorotoluene	50.0	45.2		ug/L		90	70 - 130
o-Xylene	50.0	46.4		ug/L		93	70 - 130
p-Chlorotoluene	50.0	43.8		ug/L		88	70 - 130
p-Isopropyltoluene	50.0	46.2		ug/L		92	65 - 130
sec-Butylbenzene	50.0	45.5		ug/L		91	66 - 130
Styrene	50.0	48.5		ug/L		97	70 - 130
tert-Butylbenzene	50.0	42.8		ug/L		86	64 - 139
1,1,1,2-Tetrachloroethane	50.0	43.9		ug/L		88	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/L		95	70 - 131
Tetrachloroethene	50.0	47.4		ug/L		95	65 - 130
Toluene	50.0	46.6		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	45.9		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	42.1		ug/L		84	63 - 130
1,2,3-Trichlorobenzene	50.0	49.9		ug/L		100	60 - 138
1,2,4-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	38.3		ug/L		77	68 - 130
1,1,2-Trichloroethane	50.0	48.2		ug/L		96	70 - 130
Trichloroethene	50.0	45.7		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	44.6		ug/L		89	65 - 138

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

Lab Sample ID: LCS 400-461683/1002
Matrix: Water
Analysis Batch: 461683

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	45.2		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	45.1		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	50.0	44.7		ug/L		89	69 - 130
Vinyl acetate	100	102		ug/L		102	26 - 160
Vinyl chloride	50.0	45.1		ug/L		90	59 - 136
Xylenes, Total	100	93.0		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*93*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
Benzenethiol	ND		10	1.7	ug/L		10/10/19 10:33	10/18/19 11:28	1
Benzoic acid	ND		30	7.3	ug/L		10/10/19 10:33	10/18/19 11:28	1
Benzyl alcohol	ND		10	2.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/10/19 10:33	10/18/19 11:28	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/10/19 10:33	10/18/19 11:28	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/10/19 10:33	10/18/19 11:28	1
Bis(2-ethylhexyl) phthalate	12.5		10	5.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/10/19 10:33	10/18/19 11:28	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Chloroaniline	ND		10	3.4	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Chlorophenol	ND		10	2.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Dibenzofuran	ND		10	0.52	ug/L		10/10/19 10:33	10/18/19 11:28	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Diethyl phthalate	ND		10	0.70	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/10/19 10:33	10/18/19 11:28	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/10/19 10:33	10/18/19 11:28	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/10/19 10:33	10/18/19 11:28	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/10/19 10:33	10/18/19 11:28	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/10/19 10:33	10/18/19 11:28	1
1,4-Dioxane	ND		10	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/10/19 10:33	10/18/19 11:28	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/10/19 10:33	10/18/19 11:28	1
Hexachloroethane	ND		10	4.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
Indene	ND		10	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Isophorone	ND		10	0.57	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Methylphenol	ND		10	1.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Nitroaniline	ND		10	2.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
3-Nitroaniline	ND		10	1.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Nitroaniline	ND		10	2.5	ug/L		10/10/19 10:33	10/18/19 11:28	1
Nitrobenzene	ND		10	0.55	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Nitrophenol	ND		10	0.65	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Nitrophenol	ND		10	2.1	ug/L		10/10/19 10:33	10/18/19 11:28	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/10/19 10:33	10/18/19 11:28	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/10/19 10:33	10/18/19 11:28	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/10/19 10:33	10/18/19 11:28	1
Pentachlorophenol	ND		20	1.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
Phenol	ND		10	2.6	ug/L		10/10/19 10:33	10/18/19 11:28	1
Pyridine	ND		10	3.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
Quinoline	ND		10	6.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/10/19 10:33	10/18/19 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
Phenol-d5	*66*		*10 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
Terphenyl-d14	*84*		*53 - 125*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*10/10/19 10:33*	*10/18/19 11:28*	*1*

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	24.6		ug/L		82	29 - 120
Benzoic acid	117	94.4		ug/L		81	10 - 150
Benzyl alcohol	30.0	22.1		ug/L		74	19 - 125
Bis(2-chloroethoxy)methane	30.0	25.0		ug/L		83	45 - 120
Bis(2-chloroethyl)ether	30.0	22.4		ug/L		75	48 - 120
bis (2-chloroisopropyl) ether	30.0	24.0		ug/L		80	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	24.1		ug/L		80	48 - 150
4-Bromophenyl phenyl ether	30.0	21.9		ug/L		73	55 - 122
Butyl benzyl phthalate	30.0	23.8		ug/L		79	46 - 145
4-Chloroaniline	30.0	23.0		ug/L		77	30 - 120
4-Chloro-3-methylphenol	30.0	24.5		ug/L		82	39 - 140

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

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	20.9		ug/L		70	52 - 120
2-Chlorophenol	30.0	20.3		ug/L		68	34 - 120
4-Chlorophenyl phenyl ether	30.0	20.7		ug/L		69	58 - 124
Dibenz[a,h]acridine	30.0	22.3		ug/L		74	46 - 149
Dibenzofuran	30.0	21.4		ug/L		71	58 - 123
3,3'-Dichlorobenzidine	40.0	39.6		ug/L		99	39 - 135
2,4-Dichlorophenol	30.0	24.0		ug/L		80	39 - 128
Diethyl phthalate	30.0	26.4		ug/L		88	44 - 146
2,4-Dimethylphenol	30.0	24.5		ug/L		82	44 - 120
Dimethyl phthalate	30.0	24.7		ug/L		82	50 - 131
Di-n-butyl phthalate	30.0	24.0		ug/L		80	55 - 131
4,6-Dinitro-ortho-cresol	60.0	61.2		ug/L		102	10 - 150
2,4-Dinitrophenol	60.0	59.7		ug/L		100	10 - 150
2,4-Dinitrotoluene	30.0	25.2		ug/L		84	58 - 140
2,6-Dinitrotoluene	30.0	25.4		ug/L		85	57 - 130
Di-n-octyl phthalate	30.0	25.2		ug/L		84	50 - 150
1,4-Dioxane	30.0	15.9		ug/L		53	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.2		ug/L		77	47 - 123
Hexachlorobenzene	30.0	20.8		ug/L		69	52 - 131
Hexachlorocyclopentadiene	30.0	5.60	J	ug/L		19	10 - 129
Hexachloroethane	30.0	13.0		ug/L		43	41 - 120
Indene	30.0	22.7		ug/L		76	47 - 120
Isophorone	30.0	24.4		ug/L		81	49 - 120
2-Methylphenol	30.0	26.5		ug/L		88	39 - 123
3 & 4 Methylphenol	30.0	24.3		ug/L		81	38 - 121
2-Nitroaniline	30.0	26.8		ug/L		89	47 - 150
3-Nitroaniline	30.0	24.2		ug/L		81	34 - 132
4-Nitroaniline	30.0	28.2		ug/L		94	41 - 135
Nitrobenzene	30.0	23.7		ug/L		79	47 - 120
2-Nitrophenol	30.0	24.7		ug/L		82	28 - 136
4-Nitrophenol	60.0	57.6		ug/L		96	10 - 150
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148
N-Nitrosodi-n-propylamine	30.0	27.1		ug/L		90	44 - 120
N-Nitrosodiphenylamine	29.8	25.7		ug/L		86	56 - 120
Pentachlorophenol	60.0	50.1		ug/L		84	15 - 141
Phenol	30.0	21.0		ug/L		70	33 - 120
Pyridine	60.0	35.6		ug/L		59	26 - 120
Quinoline	30.0	23.2		ug/L		77	51 - 129
2,4,5-Trichlorophenol	30.0	24.9		ug/L		83	38 - 147
2,4,6-Trichlorophenol	30.0	24.6		ug/L		82	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Phenol-d5	*73*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*

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

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	74		15 - 135

Lab Sample ID: LCS 400-460952/4-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

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	86		34 - 120
2-Fluorophenol	51		10 - 120
Nitrobenzene-d5	78		27 - 120
Phenol-d5	73		10 - 120
Terphenyl-d14	87		53 - 125
2,4,6-Tribromophenol	72		15 - 135

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	22.3		ug/L		74	29 - 120	10	30
Benzoic acid	117	94.6		ug/L		81	10 - 150	0	30
Benzyl alcohol	30.0	22.2		ug/L		74	19 - 125	1	30
Bis(2-chloroethoxy)methane	30.0	24.8		ug/L		83	45 - 120	1	30
Bis(2-chloroethyl)ether	30.0	25.9		ug/L		86	48 - 120	15	30
bis (2-chloroisopropyl) ether	30.0	24.7		ug/L		82	30 - 125	3	30
Bis(2-ethylhexyl) phthalate	30.0	36.3	*	ug/L		121	48 - 150	40	30
4-Bromophenyl phenyl ether	30.0	24.9		ug/L		83	55 - 122	13	30
Butyl benzyl phthalate	30.0	27.1		ug/L		90	46 - 145	13	30
4-Chloroaniline	30.0	22.4		ug/L		75	30 - 120	2	30
4-Chloro-3-methylphenol	30.0	24.1		ug/L		80	39 - 140	2	30
2-Chloronaphthalene	30.0	23.2		ug/L		77	52 - 120	11	30
2-Chlorophenol	30.0	21.8		ug/L		73	34 - 120	7	30
4-Chlorophenyl phenyl ether	30.0	23.7		ug/L		79	58 - 124	14	30
Dibenz[a,h]acridine	30.0	26.7		ug/L		89	46 - 149	18	30
Dibenzofuran	30.0	23.9		ug/L		80	58 - 123	11	30
3,3'-Dichlorobenzidine	40.0	41.7		ug/L		104	39 - 135	5	30
2,4-Dichlorophenol	30.0	23.9		ug/L		80	39 - 128	0	30
Diethyl phthalate	30.0	27.5		ug/L		92	44 - 146	4	30
2,4-Dimethylphenol	30.0	23.8		ug/L		79	44 - 120	3	30
Dimethyl phthalate	30.0	25.4		ug/L		85	50 - 131	3	30
Di-n-butyl phthalate	30.0	28.5		ug/L		95	55 - 131	17	30
4,6-Dinitro-ortho-cresol	60.0	61.9		ug/L		103	10 - 150	1	30
2,4-Dinitrophenol	60.0	61.4		ug/L		102	10 - 150	3	30
2,4-Dinitrotoluene	30.0	26.0		ug/L		87	58 - 140	3	30
2,6-Dinitrotoluene	30.0	25.9		ug/L		86	57 - 130	2	30

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

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	29.4		ug/L		98	50 - 150	15	30
1,4-Dioxane	30.0	17.7		ug/L		59	25 - 120	11	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.9		ug/L		86	47 - 123	11	30
Hexachlorobenzene	30.0	24.0		ug/L		80	52 - 131	14	30
Hexachlorocyclopentadiene	30.0	5.46	J	ug/L		18	10 - 129	3	30
Hexachloroethane	30.0	15.8		ug/L		53	41 - 120	20	30
Indene	30.0	22.6		ug/L		75	47 - 120	0	30
Isophorone	30.0	24.4		ug/L		81	49 - 120	0	30
2-Methylphenol	30.0	27.3		ug/L		91	39 - 123	3	30
3 & 4 Methylphenol	30.0	24.9		ug/L		83	38 - 121	3	30
2-Nitroaniline	30.0	26.7		ug/L		89	47 - 150	0	30
3-Nitroaniline	30.0	24.4		ug/L		81	34 - 132	1	30
4-Nitroaniline	30.0	29.0		ug/L		97	41 - 135	3	30
Nitrobenzene	30.0	23.6		ug/L		79	47 - 120	0	30
2-Nitrophenol	30.0	25.7		ug/L		86	28 - 136	4	30
4-Nitrophenol	60.0	58.5		ug/L		98	10 - 150	2	30
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148	0	30
N-Nitrosodi-n-propylamine	30.0	26.6		ug/L		89	44 - 120	2	30
N-Nitrosodiphenylamine	29.8	27.1		ug/L		91	56 - 120	5	30
Pentachlorophenol	60.0	52.1		ug/L		87	15 - 141	4	30
Phenol	30.0	21.9		ug/L		73	33 - 120	4	30
Pyridine	60.0	40.2		ug/L		67	26 - 120	12	30
Quinoline	30.0	23.3		ug/L		78	51 - 129	1	30
2,4,5-Trichlorophenol	30.0	25.6		ug/L		85	38 - 147	3	30
2,4,6-Trichlorophenol	30.0	25.2		ug/L		84	36 - 139	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*83*		*27 - 120*
Phenol-d5	*73*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*78*		*15 - 135*

Lab Sample ID: LCSD 400-460952/5-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	40	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*34 - 120*
2-Fluorophenol	*63*		*10 - 120*
Nitrobenzene-d5	*71*		*27 - 120*
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*82*		*53 - 125*

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

Lab Sample ID: LCSD 400-460952/5-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	65		15 - 135

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Anthracene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Chrysene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Fluoranthene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Fluorene	ND		0.20	0.021	ug/L		10/10/19 10:33	10/18/19 14:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Phenanthrene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Pyrene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	229	X	33 - 138	10/10/19 10:33	10/18/19 14:23	1
2-Fluorobiphenyl	107		15 - 122	10/10/19 10:33	10/18/19 14:23	1
Nitrobenzene-d5	120		19 - 130	10/10/19 10:33	10/18/19 14:23	1

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.4		ug/L		81	41 - 120
Acenaphthylene	30.0	24.1		ug/L		80	44 - 120
Anthracene	30.0	23.2		ug/L		77	49 - 120
Benzo[a]anthracene	30.0	23.1		ug/L		77	61 - 135
Benzo[a]pyrene	30.0	19.4		ug/L		65	52 - 120
Benzo[b]fluoranthene	30.0	19.6		ug/L		65	53 - 134
Benzo[g,h,i]perylene	30.0	23.2		ug/L		77	47 - 133
Benzo[k]fluoranthene	30.0	22.1		ug/L		74	57 - 134
Chrysene	30.0	23.2		ug/L		77	55 - 122
Dibenz(a,h)anthracene	30.0	26.5		ug/L		88	48 - 146
Fluoranthene	30.0	22.7		ug/L		76	54 - 128

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

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	27.8		ug/L		93	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.5		ug/L		82	43 - 142
Phenanthrene	30.0	23.6		ug/L		79	48 - 120
Pyrene	30.0	32.9		ug/L		110	48 - 132
1-Methylnaphthalene	30.0	17.0		ug/L		57	41 - 120
2-Methylnaphthalene	30.0	16.1		ug/L		54	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*119*		*33 - 138*
2-Fluorobiphenyl	*82*		*15 - 122*
Nitrobenzene-d5	*75*		*19 - 130*

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.9		ug/L		93	41 - 120	13	56
Acenaphthylene	30.0	26.8		ug/L		89	44 - 120	11	56
Anthracene	30.0	26.1		ug/L		87	49 - 120	12	51
Benzo[a]anthracene	30.0	26.0		ug/L		87	61 - 135	12	49
Benzo[a]pyrene	30.0	23.0		ug/L		77	52 - 120	17	50
Benzo[b]fluoranthene	30.0	24.0		ug/L		80	53 - 134	20	54
Benzo[g,h,i]perylene	30.0	27.0		ug/L		90	47 - 133	15	50
Benzo[k]fluoranthene	30.0	26.9		ug/L		90	57 - 134	20	52
Chrysene	30.0	25.9		ug/L		86	55 - 122	11	50
Dibenz(a,h)anthracene	30.0	30.9		ug/L		103	48 - 146	15	50
Fluoranthene	30.0	26.1		ug/L		87	54 - 128	14	52
Fluorene	30.0	31.9		ug/L		106	45 - 125	14	56
Indeno[1,2,3-cd]pyrene	30.0	28.6		ug/L		95	43 - 142	15	51
Phenanthrene	30.0	27.2		ug/L		91	48 - 120	14	56
Pyrene	30.0	39.2		ug/L		131	48 - 132	18	52
1-Methylnaphthalene	30.0	19.5		ug/L		65	41 - 120	14	55
2-Methylnaphthalene	30.0	18.9		ug/L		63	32 - 124	16	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*125*		*33 - 138*
2-Fluorobiphenyl	*85*		*15 - 122*
Nitrobenzene-d5	*77*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-460502/1-A
Matrix: Water
Analysis Batch: 460564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460502

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		10/08/19 08:59	10/08/19 13:14	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-460502/1-A
Matrix: Water
Analysis Batch: 460564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/08/19 08:59	10/08/19 13:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*10/08/19 08:59*	*10/08/19 13:14*	*1*

Lab Sample ID: LCS 400-460502/2-A
Matrix: Water
Analysis Batch: 460564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.100		ug/L		100	60 - 140
1,2-Dibromoethane	0.100	0.107		ug/L		107	60 - 140

Surrogate	*LCS %Recovery*	*LCS 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 # T364589 (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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE 10/3/19
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 - 1.03.004 / 60592794 - 1.03.0044

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Office ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill to Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com
SAMPLER NAME(S) (Print): B. Howell B. Burleson
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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL
	TB-ROX-100319-8011	10/3/19	0000	Water	X					2			2	
	TB-ROX-100319-8260	10/3/19	0000		X					2	2			
	MW27-ROX-100319-EBC	10/3/19	1100		X			X		6	2	1	2	1
	MW27-ROX-100319	10/3/19	1250		X			X		6	2	1	2	1

400-177518 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
4.9C, 4.8C
4.7C JDB
Container PID Readings or Laboratory Notes

Relinquished by (Signature)	Received by (Signature)	Date	Time
B. Howell	Fedex: 1155 5318 3344 1155 5318 3322 1155 5318 3333	10/3/19	1600
	T. Pen	10/4/19	9:23

Custody seal #s: 1090662 1090667
1090663
1090664
1090665
1090666

Version: 14Dec15

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10/28/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177518-1

Login Number: 177518
List Number: 1
Creator: Brown, Nathan

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9°C, 4.8°C, 4.7°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-177518-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177567-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/21/2019

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

Sample Identification	Sample Identification
TB-ROX-100419-8260	TB-ROX-100419-8011
P54-ROX-100419	MW11-ROX-100419
MW28-ROX-100419	MW12-ROX-100419

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 SVOC method blank. Several SVOC LCS/LCD recoveries and/or SVOC LCS/LCSD RPDs were outside evaluation criteria. Several PAH surrogate recoveries were outside criteria in several investigative and QC samples. Several VOC and PAH MS/MSD recoveries and MS/MSD RPDs were outside evaluation criteria in sample P54-ROX-100419. The continuing calibration verification for benzyl alcohol 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 400-460952/1-A	SVOCs	bis(2-Ethylhexyl) phthalate	12.5 µg/L

Qualifications due to blank contamination are included in the table below. Analytical

data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
MW12-ROX-100419	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 400-460952/4-A/5-A	SVOCs	Benzenethiol	**1/2**	**40**	10-120/30
LCS/LCSD 400-460952/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	80/121	**40**	48-150/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-460952/4-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.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-100419	SVOCs	Benzenethiol	**UJ**
MW11-ROX-100419	SVOCs	Benzenethiol	**UJ**
MW28-ROX-100419	SVOCs	Benzenethiol	**UJ**
MW12-ROX-100419	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P54-ROX-100419	PAHs	Terphenyl-d_{14}	**219**	33-138
P54-ROX-100419	PAHs	2-Fluorobiphenyl	**160**	15-122
P54-ROX-100419	PAHs	Nitrobenzene-d_5	**142**	19-130
MW11-ROX-100419	PAHs	Terphenyl-d_{14}	**208**	33-138
MW11-ROX-100419	PAHs	2-Fluorobiphenyl	**165**	15-122
MW11-ROX-100419	PAHs	Nitrobenzene-d_5	**140**	19-130
MW28-ROX-100419	PAHs	Terphenyl-d_{14}	**194**	33-138
MW28-ROX-100419	PAHs	2-Fluorobiphenyl	**140**	15-122
MW12-ROX-100419	PAHs	Terphenyl-d_{14}	**212**	33-138
MW12-ROX-100419	PAHs	2-Fluorobiphenyl	**156**	15-122

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-460952/1-A	PAHs	Terphenyl-d_{14}	**229**	33-138

Analytical data that required qualification based on surrogate recovery outside evaluation criteria are included in the table below. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Method blank MB 400-460952/1-A is a quality control sample and does not require qualification.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-100419	PAHs	1-Methylnaphthalene	**J**
P54-ROX-100419	PAHs	2-Methylnaphthalene	**J**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample P54-ROX-100419 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
P54-ROX-100419	VOCs	Acetone	**32/30**	7	43-150/30
P54-ROX-100419	VOCs	2-Butanone (MEK)	**49/45**	9	55-150/30
P54-ROX-100419	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
P54-ROX-100419	VOCs	2-Hexanone	**56/54**	3	65-140/30
P54-ROX-100419	PAHs	Pyrene	**143/152**	4	41-127/58

Analytical data that required qualification based on MS/MSD data are included in the table below.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-100419	VOCs	Acetone	**UJ**
P54-ROX-100419	VOCs	2-Butanone (MEK)	**UJ**
P54-ROX-100419	VOCs	2-Chloroethyl vinyl ether	**UJ**
P54-ROX-100419	VOCs	2-Hexanone	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for benzyl alcohol was below acceptance criteria and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-100419	SVOCs	Benzyl alcohol	**UJ**
MW11-ROX-100419	SVOCs	Benzyl alcohol	**UJ**
MW28-ROX-100419	SVOCs	Benzyl alcohol	**UJ**
MW12-ROX-100419	SVOCs	Benzyl alcohol	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-177567-1
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:
10/28/2019 2:03:29 PM

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

Reviewed 11/21/19 LR

LINKS

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

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

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

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Job ID: 400-177567-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177567-1

Comments
No additional comments.

Receipt
The samples were received on 10/5/2019 8:18 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.7° C, 1.3° C, 1.8° C and 5.4° C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-461871 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-461871 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-461871 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-100419-8260 (400-177567-1), P54-ROX-100419 (400-177567-3), MW11-ROX-100419 (400-177567-4), MW28-ROX-100419 (400-177567-5) and MW12-ROX-100419 (400-177567-6). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-460952 and analytical batch 400-462116 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-460952 and analytical batch 400-462116 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-460952 and analytical batch 400-462116 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462116 recovered outside acceptance criteria, low biased, for Benzyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The method blank for preparation batch 400-460952 and 400-460952 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). The samples associated with this method blank were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples were not performed. The following samples are impacted: P54-ROX-100419 (400-177567-3), MW11-ROX-100419 (400-177567-4), MW28-ROX-100419 (400-177567-5) and (MB 400-460952/1-A).

Method 8270D LL: Surrogate recovery for the following samples were outside the upper control limit: P54-ROX-100419 (400-177567-3), MW11-ROX-100419 (400-177567-4), MW28-ROX-100419 (400-177567-5) and MW12-ROX-100419 (400-177567-6). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-462131 recovered above the upper control limit

Job ID: 400-177567-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

for Pyrene and Fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-460952 and analytical batch 400-462131 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: Due to the lab contamination, bis(2-ethylhexyl) phthalate was detected above the reporting limit (RL) in the method blank as well as in the following sample: MW12-ROX-100419 (400-177567-6).

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-460564 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-460564 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

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

Job ID: 400-177567-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177567-1	TB-ROX-100419-8260	Water	10/04/19 00:00	10/05/19 08:18	
400-177567-2	TB-ROX-100419-8011	Water	10/04/19 00:00	10/05/19 08:18	
400-177567-3	P54-ROX-100419	Water	10/04/19 09:20	10/05/19 08:18	
400-177567-4	MW11-ROX-100419	Water	10/04/19 10:35	10/05/19 08:18	
400-177567-5	MW28-ROX-100419	Water	10/04/19 11:20	10/05/19 08:18	
400-177567-6	MW12-ROX-100419	Water	10/04/19 12:40	10/05/19 08:18	

Detection Summary

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

Job ID: 400-177567-1

Client Sample ID: TB-ROX-100419-8260 — Lab Sample ID: 400-177567-1

No Detections.

Client Sample ID: TB-ROX-100419-8011 — Lab Sample ID: 400-177567-2

No Detections.

Client Sample ID: P54-ROX-100419 — Lab Sample ID: 400-177567-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.026	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.026	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW11-ROX-100419 — Lab Sample ID: 400-177567-4

No Detections.

Client Sample ID: MW28-ROX-100419 — Lab Sample ID: 400-177567-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.47	J	1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	35		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: MW12-ROX-100419 — Lab Sample ID: 400-177567-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	7.3	J B *	9.6	4.8	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-100419-8260
Date Collected: 10/04/19 00:00
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-1
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			10/16/19 22:21	1
Acrolein	ND		20	10	ug/L			10/16/19 22:21	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/19 22:21	1
Benzene	ND		1.0	0.38	ug/L			10/16/19 22:21	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/19 22:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/19 22:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Bromoform	ND		5.0	0.71	ug/L			10/16/19 22:21	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/19 22:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/19 22:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/19 22:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/19 22:21	1
Chloroform	ND		1.0	0.60	ug/L			10/16/19 22:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/16/19 22:21	1
Chloromethane	ND		1.0	0.83	ug/L			10/16/19 22:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 22:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/19 22:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/19 22:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/19 22:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/19 22:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/19 22:21	1
2-Hexanone	ND		25	3.1	ug/L			10/16/19 22:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/19 22:21	1
Methylene bromide	ND		5.0	0.59	ug/L			10/16/19 22:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/19 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/19 22:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/16/19 22:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/16/19 22:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/19 22:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/19 22:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/19 22:21	1
o-Xylene	ND		5.0	0.60	ug/L			10/16/19 22:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/19 22:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/19 22:21	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/16/19 22:21	1

Client Sample ID: TB-ROX-100419-8260
Date Collected: 10/04/19 00:00
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-1
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			10/16/19 22:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/19 22:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/16/19 22:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/16/19 22:21	1
Toluene	ND		1.0	0.41	ug/L			10/16/19 22:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 22:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/19 22:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/16/19 22:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/16/19 22:21	1
Trichloroethene	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/16/19 22:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/19 22:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/19 22:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/19 22:21	1
Vinyl acetate	ND		25	2.0	ug/L			10/16/19 22:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/19 22:21	1
Xylenes, Total	ND		10	1.6	ug/L			10/16/19 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*10/16/19 22:21*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*10/16/19 22:21*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*10/16/19 22:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			10/17/19 13:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/17/19 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/17/19 13:53*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/17/19 13:53*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*10/17/19 13:53*	*1*

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

Job ID: 400-177567-1

Client Sample ID: TB-ROX-100419-8011
Date Collected: 10/04/19 00:00
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/08/19 09:00	10/08/19 19:47	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/08/19 09:00	10/08/19 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*10/08/19 09:00*	*10/08/19 19:47*	*1*

Client Sample ID: P54-ROX-100419
Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/16/19 20:34	1
Acrolein	ND		20	10	ug/L			10/16/19 20:34	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/19 20:34	1
Benzene	ND		1.0	0.38	ug/L			10/16/19 20:34	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/19 20:34	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/19 20:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Bromoform	ND		5.0	0.71	ug/L			10/16/19 20:34	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/19 20:34	1
2-Butanone (MEK)	ND	F1 UJ	25	2.6	ug/L			10/16/19 20:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/19 20:34	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/16/19 20:34	1
Chloroform	ND		1.0	0.60	ug/L			10/16/19 20:34	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/16/19 20:34	1
Chloromethane	ND		1.0	0.83	ug/L			10/16/19 20:34	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 20:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/19 20:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/19 20:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/19 20:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/19 20:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/19 20:34	1
2-Hexanone	ND	F1 UJ	25	3.1	ug/L			10/16/19 20:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/19 20:34	1
Methylene bromide	ND		5.0	0.59	ug/L			10/16/19 20:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/19 20:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/19 20:34	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/16/19 20:34	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/16/19 20:34	1
Naphthalene	ND		1.0	1.0	ug/L			10/16/19 20:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/19 20:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/19 20:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/19 20:34	1
o-Xylene	ND		5.0	0.60	ug/L			10/16/19 20:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/19 20:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/19 20:34	1

Client Sample ID: P54-ROX-100419
Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3
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			10/16/19 20:34	1
Styrene	ND		1.0	1.0	ug/L			10/16/19 20:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/19 20:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/16/19 20:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/16/19 20:34	1
Toluene	ND		1.0	0.41	ug/L			10/16/19 20:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 20:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/16/19 20:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/19 20:34	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/16/19 20:34	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/16/19 20:34	1
Trichloroethene	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/16/19 20:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/19 20:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/19 20:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/19 20:34	1
Vinyl acetate	ND		25	2.0	ug/L			10/16/19 20:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/19 20:34	1
Xylenes, Total	ND		10	1.6	ug/L			10/16/19 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*10/16/19 20:34*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*10/16/19 20:34*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/16/19 20:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
Anthracene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Chrysene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Fluoranthene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
Fluorene	ND		0.19	0.020	ug/L		10/10/19 18:40	10/18/19 17:17	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 17:17	1
Phenanthrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
Pyrene	ND	F1	0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
1-Methylnaphthalene	**0.026**	**J**	0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1
2-Methylnaphthalene	**0.026**	**J**	0.19	0.019	ug/L		10/10/19 18:40	10/18/19 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*219*	*X*	*33 - 138*	*10/10/19 18:40*	*10/18/19 17:17*	*1*
2-Fluorobiphenyl	*160*	*X*	*15 - 122*	*10/10/19 18:40*	*10/18/19 17:17*	*1*

Client Sample ID: P54-ROX-100419
Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	142	X	19 - 130	10/10/19 18:40	10/18/19 17:17	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		10/10/19 18:40	10/18/19 15:16	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/10/19 18:40	10/18/19 15:16	1
Benzoic acid	ND		29	7.0	ug/L		10/10/19 18:40	10/18/19 15:16	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/10/19 18:40	10/18/19 15:16	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/10/19 18:40	10/18/19 15:16	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/10/19 18:40	10/18/19 15:16	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/10/19 18:40	10/18/19 15:16	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		10/10/19 18:40	10/18/19 15:16	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/10/19 18:40	10/18/19 15:16	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/10/19 18:40	10/18/19 15:16	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/10/19 18:40	10/18/19 15:16	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/10/19 18:40	10/18/19 15:16	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 15:16	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 15:16	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 15:16	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 15:16	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 15:16	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 15:16	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 15:16	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/10/19 18:40	10/18/19 15:16	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/10/19 18:40	10/18/19 15:16	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 15:16	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/10/19 18:40	10/18/19 15:16	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 15:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 15:16	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/10/19 18:40	10/18/19 15:16	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/10/19 18:40	10/18/19 15:16	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/10/19 18:40	10/18/19 15:16	1
Indene	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 15:16	1
Isophorone	ND		9.6	0.55	ug/L		10/10/19 18:40	10/18/19 15:16	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 15:16	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/10/19 18:40	10/18/19 15:16	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 15:16	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 15:16	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/10/19 18:40	10/18/19 15:16	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/10/19 18:40	10/18/19 15:16	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/10/19 18:40	10/18/19 15:16	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/10/19 18:40	10/18/19 15:16	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 15:16	1

Client Sample ID: P54-ROX-100419
Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3
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		10/10/19 18:40	10/18/19 15:16	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/10/19 18:40	10/18/19 15:16	1
Pentachlorophenol	ND		19	1.7	ug/L		10/10/19 18:40	10/18/19 15:16	1
Phenol	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 15:16	1
Pyridine	ND		9.6	3.1	ug/L		10/10/19 18:40	10/18/19 15:16	1
Quinoline	ND		9.6	5.7	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/10/19 18:40	10/18/19 15:16	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*34 - 120*	*10/10/19 18:40*	*10/18/19 15:16*	*1*
2-Fluorophenol	*60*		*10 - 120*	*10/10/19 18:40*	*10/18/19 15:16*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*10/10/19 18:40*	*10/18/19 15:16*	*1*
Phenol-d5	*70*		*10 - 120*	*10/10/19 18:40*	*10/18/19 15:16*	*1*
Terphenyl-d14	*87*		*53 - 125*	*10/10/19 18:40*	*10/18/19 15:16*	*1*
2,4,6-Tribromophenol	*61*		*15 - 135*	*10/10/19 18:40*	*10/18/19 15:16*	*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		10/08/19 09:00	10/08/19 14:46	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/08/19 09:00	10/08/19 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*10/08/19 09:00*	*10/08/19 14:46*	*1*

Client Sample ID: MW11-ROX-100419
Date Collected: 10/04/19 10:35
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-4
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			10/17/19 01:53	1
Acrolein	ND		20	10	ug/L			10/17/19 01:53	1
Acrylonitrile	ND		10	2.8	ug/L			10/17/19 01:53	1
Benzene	ND		1.0	0.38	ug/L			10/17/19 01:53	1
Bromobenzene	ND		1.0	0.54	ug/L			10/17/19 01:53	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/17/19 01:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Bromoform	ND		5.0	0.71	ug/L			10/17/19 01:53	1
Bromomethane	ND		1.0	0.98	ug/L			10/17/19 01:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/17/19 01:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Chloroethane	ND		1.0	0.76	ug/L			10/17/19 01:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/17/19 01:53	1
Chloroform	ND		1.0	0.60	ug/L			10/17/19 01:53	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/17/19 01:53	1
Chloromethane	ND		1.0	0.83	ug/L			10/17/19 01:53	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/17/19 01:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/17/19 01:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/17/19 01:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/17/19 01:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/17/19 01:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/17/19 01:53	1
2-Hexanone	ND		25	3.1	ug/L			10/17/19 01:53	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/17/19 01:53	1
Methylene bromide	ND		5.0	0.59	ug/L			10/17/19 01:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/17/19 01:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/17/19 01:53	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/17/19 01:53	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/17/19 01:53	1
Naphthalene	ND		1.0	1.0	ug/L			10/17/19 01:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/17/19 01:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/17/19 01:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/17/19 01:53	1
o-Xylene	ND		5.0	0.60	ug/L			10/17/19 01:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/17/19 01:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/17/19 01:53	1

Client Sample ID: MW11-ROX-100419
Date Collected: 10/04/19 10:35
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-4
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			10/17/19 01:53	1
Styrene	ND		1.0	1.0	ug/L			10/17/19 01:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/17/19 01:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/17/19 01:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/17/19 01:53	1
Toluene	ND		1.0	0.41	ug/L			10/17/19 01:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/17/19 01:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/17/19 01:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/17/19 01:53	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/17/19 01:53	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/17/19 01:53	1
Trichloroethene	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/17/19 01:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/17/19 01:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/17/19 01:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/17/19 01:53	1
Vinyl acetate	ND		25	2.0	ug/L			10/17/19 01:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/17/19 01:53	1
Xylenes, Total	ND		10	1.6	ug/L			10/17/19 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*10/17/19 01:53*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*10/17/19 01:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/17/19 01:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
Anthracene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Chrysene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Fluoranthene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
Fluorene	ND		0.19	0.020	ug/L		10/10/19 18:40	10/18/19 18:36	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		10/10/19 18:40	10/18/19 18:36	1
Phenanthrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
Pyrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*208*	*X*	*33 - 138*	*10/10/19 18:40*	*10/18/19 18:36*	*1*
2-Fluorobiphenyl	*165*	*X*	*15 - 122*	*10/10/19 18:40*	*10/18/19 18:36*	*1*

Client Sample ID: MW11-ROX-100419
Date Collected: 10/04/19 10:35
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	140	X	19 - 130	10/10/19 18:40	10/18/19 18:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		10/10/19 18:40	10/18/19 15:41	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/10/19 18:40	10/18/19 15:41	1
Benzoic acid	ND		29	7.0	ug/L		10/10/19 18:40	10/18/19 15:41	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/10/19 18:40	10/18/19 15:41	1
Bis(2-chloroethoxy)methane	ND		9.6	0.67	ug/L		10/10/19 18:40	10/18/19 15:41	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/10/19 18:40	10/18/19 15:41	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/10/19 18:40	10/18/19 15:41	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		10/10/19 18:40	10/18/19 15:41	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/10/19 18:40	10/18/19 15:41	1
Butyl benzyl phthalate	ND		9.6	0.67	ug/L		10/10/19 18:40	10/18/19 15:41	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/10/19 18:40	10/18/19 15:41	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		10/10/19 18:40	10/18/19 15:41	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 15:41	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 15:41	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 15:41	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 15:41	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 15:41	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 15:41	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 15:41	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		10/10/19 18:40	10/18/19 15:41	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/10/19 18:40	10/18/19 15:41	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 15:41	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/10/19 18:40	10/18/19 15:41	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 15:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 15:41	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/10/19 18:40	10/18/19 15:41	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/10/19 18:40	10/18/19 15:41	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/10/19 18:40	10/18/19 15:41	1
Indene	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 15:41	1
Isophorone	ND		9.6	0.55	ug/L		10/10/19 18:40	10/18/19 15:41	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 15:41	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/10/19 18:40	10/18/19 15:41	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 15:41	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 15:41	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/10/19 18:40	10/18/19 15:41	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/10/19 18:40	10/18/19 15:41	1
2-Nitrophenol	ND		9.6	0.63	ug/L		10/10/19 18:40	10/18/19 15:41	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/10/19 18:40	10/18/19 15:41	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 15:41	1

Client Sample ID: MW11-ROX-100419
Date Collected: 10/04/19 10:35
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/10/19 18:40	10/18/19 15:41	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/10/19 18:40	10/18/19 15:41	1
Pentachlorophenol	ND		19	1.7	ug/L		10/10/19 18:40	10/18/19 15:41	1
Phenol	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 15:41	1
Pyridine	ND		9.6	3.1	ug/L		10/10/19 18:40	10/18/19 15:41	1
Quinoline	ND		9.6	5.8	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		10/10/19 18:40	10/18/19 15:41	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*34 - 120*	*10/10/19 18:40*	*10/18/19 15:41*	*1*
2-Fluorophenol	*67*		*10 - 120*	*10/10/19 18:40*	*10/18/19 15:41*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*10/10/19 18:40*	*10/18/19 15:41*	*1*
Phenol-d5	*76*		*10 - 120*	*10/10/19 18:40*	*10/18/19 15:41*	*1*
Terphenyl-d14	*89*		*53 - 125*	*10/10/19 18:40*	*10/18/19 15:41*	*1*
2,4,6-Tribromophenol	*80*		*15 - 135*	*10/10/19 18:40*	*10/18/19 15:41*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/08/19 09:00	10/08/19 20:10	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/08/19 09:00	10/08/19 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*10/08/19 09:00*	*10/08/19 20:10*	*1*

Client Sample ID: MW28-ROX-100419
Date Collected: 10/04/19 11:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-5
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			10/17/19 02:20	1
Acrolein	ND		20	10	ug/L			10/17/19 02:20	1
Acrylonitrile	ND		10	2.8	ug/L			10/17/19 02:20	1
Benzene	**0.47**	**J**	1.0	0.38	ug/L			10/17/19 02:20	1
Bromobenzene	ND		1.0	0.54	ug/L			10/17/19 02:20	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/17/19 02:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Bromoform	ND		5.0	0.71	ug/L			10/17/19 02:20	1
Bromomethane	ND		1.0	0.98	ug/L			10/17/19 02:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/17/19 02:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Chloroethane	ND		1.0	0.76	ug/L			10/17/19 02:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/17/19 02:20	1
Chloroform	ND		1.0	0.60	ug/L			10/17/19 02:20	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/17/19 02:20	1
Chloromethane	ND		1.0	0.83	ug/L			10/17/19 02:20	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/17/19 02:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/17/19 02:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/17/19 02:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/17/19 02:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/17/19 02:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/17/19 02:20	1
2-Hexanone	ND		25	3.1	ug/L			10/17/19 02:20	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/17/19 02:20	1
Methylene bromide	ND		5.0	0.59	ug/L			10/17/19 02:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/17/19 02:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/17/19 02:20	1
Methyl tert-butyl ether	**35**		1.0	0.74	ug/L			10/17/19 02:20	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/17/19 02:20	1
Naphthalene	ND		1.0	1.0	ug/L			10/17/19 02:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/17/19 02:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/17/19 02:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/17/19 02:20	1
o-Xylene	ND		5.0	0.60	ug/L			10/17/19 02:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/17/19 02:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/17/19 02:20	1

Client Sample ID: MW28-ROX-100419
Date Collected: 10/04/19 11:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-5
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			10/17/19 02:20	1
Styrene	ND		1.0	1.0	ug/L			10/17/19 02:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/17/19 02:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/17/19 02:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/17/19 02:20	1
Toluene	ND		1.0	0.41	ug/L			10/17/19 02:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/17/19 02:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/17/19 02:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/17/19 02:20	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/17/19 02:20	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/17/19 02:20	1
Trichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/17/19 02:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/17/19 02:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/17/19 02:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/17/19 02:20	1
Vinyl acetate	ND		25	2.0	ug/L			10/17/19 02:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/17/19 02:20	1
Xylenes, Total	ND		10	1.6	ug/L			10/17/19 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*10/17/19 02:20*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*10/17/19 02:20*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/17/19 02:20*	*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		10/10/19 18:40	10/18/19 18:52	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1
Anthracene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Chrysene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Fluoranthene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1
Fluorene	ND		0.19	0.020	ug/L		10/10/19 18:40	10/18/19 18:52	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 18:52	1
Phenanthrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1
Pyrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*194*	*X*	*33 - 138*	*10/10/19 18:40*	*10/18/19 18:52*	*1*
2-Fluorobiphenyl	*140*	*X*	*15 - 122*	*10/10/19 18:40*	*10/18/19 18:52*	*1*

Client Sample ID: MW28-ROX-100419
Date Collected: 10/04/19 11:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	129		19 - 130	10/10/19 18:40	10/18/19 18:52	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		10/10/19 18:40	10/18/19 16:07	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/10/19 18:40	10/18/19 16:07	1
Benzoic acid	ND		29	7.0	ug/L		10/10/19 18:40	10/18/19 16:07	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/10/19 18:40	10/18/19 16:07	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/10/19 18:40	10/18/19 16:07	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/10/19 18:40	10/18/19 16:07	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/10/19 18:40	10/18/19 16:07	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		10/10/19 18:40	10/18/19 16:07	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/10/19 18:40	10/18/19 16:07	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/10/19 18:40	10/18/19 16:07	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/10/19 18:40	10/18/19 16:07	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/10/19 18:40	10/18/19 16:07	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 16:07	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 16:07	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 16:07	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 16:07	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 16:07	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 16:07	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 16:07	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		10/10/19 18:40	10/18/19 16:07	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/10/19 18:40	10/18/19 16:07	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 16:07	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/10/19 18:40	10/18/19 16:07	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 16:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 16:07	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/10/19 18:40	10/18/19 16:07	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/10/19 18:40	10/18/19 16:07	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/10/19 18:40	10/18/19 16:07	1
Indene	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 16:07	1
Isophorone	ND		9.6	0.55	ug/L		10/10/19 18:40	10/18/19 16:07	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 16:07	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/10/19 18:40	10/18/19 16:07	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 16:07	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 16:07	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/10/19 18:40	10/18/19 16:07	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/10/19 18:40	10/18/19 16:07	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/10/19 18:40	10/18/19 16:07	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/10/19 18:40	10/18/19 16:07	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 16:07	1

Client Sample ID: MW28-ROX-100419
Date Collected: 10/04/19 11:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/10/19 18:40	10/18/19 16:07	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/10/19 18:40	10/18/19 16:07	1
Pentachlorophenol	ND		19	1.7	ug/L		10/10/19 18:40	10/18/19 16:07	1
Phenol	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 16:07	1
Pyridine	ND		9.6	3.1	ug/L		10/10/19 18:40	10/18/19 16:07	1
Quinoline	ND		9.6	5.8	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		10/10/19 18:40	10/18/19 16:07	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*34 - 120*	*10/10/19 18:40*	*10/18/19 16:07*	*1*
2-Fluorophenol	*62*		*10 - 120*	*10/10/19 18:40*	*10/18/19 16:07*	*1*
Nitrobenzene-d5	*77*		*27 - 120*	*10/10/19 18:40*	*10/18/19 16:07*	*1*
Phenol-d5	*71*		*10 - 120*	*10/10/19 18:40*	*10/18/19 16:07*	*1*
Terphenyl-d14	*85*		*53 - 125*	*10/10/19 18:40*	*10/18/19 16:07*	*1*
2,4,6-Tribromophenol	*74*		*15 - 135*	*10/10/19 18:40*	*10/18/19 16:07*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		10/08/19 09:00	10/08/19 20:33	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/08/19 09:00	10/08/19 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*10/08/19 09:00*	*10/08/19 20:33*	*1*

Client Sample ID: MW12-ROX-100419
Date Collected: 10/04/19 12:40
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-6
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			10/17/19 02:46	1
Acrolein	ND		20	10	ug/L			10/17/19 02:46	1
Acrylonitrile	ND		10	2.8	ug/L			10/17/19 02:46	1
Benzene	ND		1.0	0.38	ug/L			10/17/19 02:46	1
Bromobenzene	ND		1.0	0.54	ug/L			10/17/19 02:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/17/19 02:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Bromoform	ND		5.0	0.71	ug/L			10/17/19 02:46	1
Bromomethane	ND		1.0	0.98	ug/L			10/17/19 02:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/17/19 02:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Chloroethane	ND		1.0	0.76	ug/L			10/17/19 02:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/17/19 02:46	1
Chloroform	ND		1.0	0.60	ug/L			10/17/19 02:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/17/19 02:46	1
Chloromethane	ND		1.0	0.83	ug/L			10/17/19 02:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/17/19 02:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/17/19 02:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/17/19 02:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/17/19 02:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/17/19 02:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/17/19 02:46	1
2-Hexanone	ND		25	3.1	ug/L			10/17/19 02:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/17/19 02:46	1
Methylene bromide	ND		5.0	0.59	ug/L			10/17/19 02:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/17/19 02:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/17/19 02:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/17/19 02:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/17/19 02:46	1
Naphthalene	ND		1.0	1.0	ug/L			10/17/19 02:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/17/19 02:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/17/19 02:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/17/19 02:46	1
o-Xylene	ND		5.0	0.60	ug/L			10/17/19 02:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/17/19 02:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/17/19 02:46	1

Client Sample ID: MW12-ROX-100419
Date Collected: 10/04/19 12:40
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-6
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			10/17/19 02:46	1
Styrene	ND		1.0	1.0	ug/L			10/17/19 02:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/17/19 02:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/17/19 02:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/17/19 02:46	1
Toluene	ND		1.0	0.41	ug/L			10/17/19 02:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/17/19 02:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/17/19 02:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/17/19 02:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/17/19 02:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/17/19 02:46	1
Trichloroethene	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/17/19 02:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/17/19 02:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/17/19 02:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/17/19 02:46	1
Vinyl acetate	ND		25	2.0	ug/L			10/17/19 02:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/17/19 02:46	1
Xylenes, Total	ND		10	1.6	ug/L			10/17/19 02:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*10/17/19 02:46*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*10/17/19 02:46*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/17/19 02:46*	*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		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
Anthracene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Chrysene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Fluoranthene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
Fluorene	ND		0.19	0.020	ug/L		10/10/19 18:40	10/18/19 19:08	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/10/19 18:40	10/18/19 19:08	1
Phenanthrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
Pyrene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/10/19 18:40	10/18/19 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*212*	*X*	*33 - 138*	*10/10/19 18:40*	*10/18/19 19:08*	*1*
2-Fluorobiphenyl	*156*	*X*	*15 - 122*	*10/10/19 18:40*	*10/18/19 19:08*	*1*

Client Sample ID: MW12-ROX-100419
Date Collected: 10/04/19 12:40
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	117		19 - 130	10/10/19 18:40	10/18/19 19:08	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		10/10/19 18:40	10/18/19 16:32	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/10/19 18:40	10/18/19 16:32	1
Benzoic acid	ND		29	7.0	ug/L		10/10/19 18:40	10/18/19 16:32	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/10/19 18:40	10/18/19 16:32	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/10/19 18:40	10/18/19 16:32	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/10/19 18:40	10/18/19 16:32	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/10/19 18:40	10/18/19 16:32	1
Bis(2-ethylhexyl) phthalate	~~7.3~~	J B * U	9.6	4.8	ug/L		10/10/19 18:40	10/18/19 16:32	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/10/19 18:40	10/18/19 16:32	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/10/19 18:40	10/18/19 16:32	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/10/19 18:40	10/18/19 16:32	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		10/10/19 18:40	10/18/19 16:32	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 16:32	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 16:32	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 16:32	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 16:32	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/10/19 18:40	10/18/19 16:32	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/10/19 18:40	10/18/19 16:32	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 16:32	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		10/10/19 18:40	10/18/19 16:32	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/10/19 18:40	10/18/19 16:32	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/10/19 18:40	10/18/19 16:32	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/10/19 18:40	10/18/19 16:32	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 16:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 16:32	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/10/19 18:40	10/18/19 16:32	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/10/19 18:40	10/18/19 16:32	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/10/19 18:40	10/18/19 16:32	1
Indene	ND		9.6	0.96	ug/L		10/10/19 18:40	10/18/19 16:32	1
Isophorone	ND		9.6	0.55	ug/L		10/10/19 18:40	10/18/19 16:32	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 16:32	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/10/19 18:40	10/18/19 16:32	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/10/19 18:40	10/18/19 16:32	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/10/19 18:40	10/18/19 16:32	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/10/19 18:40	10/18/19 16:32	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/10/19 18:40	10/18/19 16:32	1
2-Nitrophenol	ND		9.6	0.63	ug/L		10/10/19 18:40	10/18/19 16:32	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/10/19 18:40	10/18/19 16:32	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 16:32	1

Client Sample ID: MW12-ROX-100419
Date Collected: 10/04/19 12:40
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/10/19 18:40	10/18/19 16:32	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/10/19 18:40	10/18/19 16:32	1
Pentachlorophenol	ND		19	1.7	ug/L		10/10/19 18:40	10/18/19 16:32	1
Phenol	ND		9.6	2.5	ug/L		10/10/19 18:40	10/18/19 16:32	1
Pyridine	ND		9.6	3.1	ug/L		10/10/19 18:40	10/18/19 16:32	1
Quinoline	ND		9.6	5.8	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		10/10/19 18:40	10/18/19 16:32	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/10/19 18:40	10/18/19 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*34 - 120*	*10/10/19 18:40*	*10/18/19 16:32*	*1*
2-Fluorophenol	*26*		*10 - 120*	*10/10/19 18:40*	*10/18/19 16:32*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*10/10/19 18:40*	*10/18/19 16:32*	*1*
Phenol-d5	*33*		*10 - 120*	*10/10/19 18:40*	*10/18/19 16:32*	*1*
Terphenyl-d14	*95*		*53 - 125*	*10/10/19 18:40*	*10/18/19 16:32*	*1*
2,4,6-Tribromophenol	*36*		*15 - 135*	*10/10/19 18:40*	*10/18/19 16:32*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/08/19 09:00	10/08/19 20:56	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		10/08/19 09:00	10/08/19 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*10/08/19 09:00*	*10/08/19 20:56*	*1*

Definitions/Glossary

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

Job ID: 400-177567-1

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.
*	RPD of the LCS and LCSD exceeds the control limits
B	Compound was found in the blank and sample.
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.
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: 400-177567-1

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)
400-177567-1	TB-ROX-100419-8260	102	100	102
400-177567-1 - RA	TB-ROX-100419-8260	94	106	90
400-177567-3	P54-ROX-100419	100	99	101
400-177567-3 MS	P54-ROX-100419	103	99	101
400-177567-3 MSD	P54-ROX-100419	106	98	102
400-177567-4	MW11-ROX-100419	101	99	100
400-177567-5	MW28-ROX-100419	98	100	101
400-177567-6	MW12-ROX-100419	100	98	100
LCS 400-461871/1002	Lab Control Sample	106	99	101
LCS 400-461910/1002	Lab Control Sample	91	105	88
MB 400-461871/4	Method Blank	100	97	101
MB 400-461910/4	Method Blank	92	105	87

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-177567-3	P54-ROX-100419	94	60	84	70	87	61
400-177567-3 MS	P54-ROX-100419	95	54	89	72	90	83
400-177567-3 MSD	P54-ROX-100419	98	43	97	67	85	77
400-177567-4	MW11-ROX-100419	95	67	84	76	89	80
400-177567-5	MW28-ROX-100419	85	62	77	71	85	74
400-177567-6	MW12-ROX-100419	93	26	84	33	95	36
LCS 400-460952/2-A	Lab Control Sample	83	50	82	73	80	74
LCS 400-460952/4-A	Lab Control Sample	86	51	78	73	87	72
LCSD 400-460952/3-A	Lab Control Sample Dup	84	54	83	73	90	78
LCSD 400-460952/5-A	Lab Control Sample Dup	75	63	71	67	82	65
MB 400-460952/1-A	Method Blank	73	51	70	66	84	69

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)
400-177567-3	P54-ROX-100419	219 X	160 X	142 X

Surrogate Summary

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

Job ID: 400-177567-1

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)
400-177567-3 MS	P54-ROX-100419	128	96	73
400-177567-3 MSD	P54-ROX-100419	127	106	93
400-177567-4	MW11-ROX-100419	208 X	165 X	140 X
400-177567-5	MW28-ROX-100419	194 X	140 X	129
400-177567-6	MW12-ROX-100419	212 X	156 X	117
LCS 400-460952/2-A	Lab Control Sample	119	82	75
LCSD 400-460952/3-A	Lab Control Sample Dup	125	85	77
MB 400-460952/1-A	Method Blank	229 X	107	120

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)
400-177567-2	TB-ROX-100419-8011	85
400-177567-3	P54-ROX-100419	86
400-177567-3 MS	P54-ROX-100419	99
400-177567-3 MSD	P54-ROX-100419	95
400-177567-4	MW11-ROX-100419	88
400-177567-5	MW28-ROX-100419	89
400-177567-6	MW12-ROX-100419	91
LCS 400-460502/2-A	Lab Control Sample	91
MB 400-460502/1-A	Method Blank	93

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177567-1

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: 400-177567-1

Client Sample ID: TB-ROX-100419-8260

Date Collected: 10/04/19 00:00
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-1
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	461871	10/16/19 22:21	PEM	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	461910	10/17/19 13:53	RS	TAL PEN

Client Sample ID: TB-ROX-100419-8011

Date Collected: 10/04/19 00:00
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.8 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 19:47	KLR	TAL PEN

Client Sample ID: P54-ROX-100419

Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3
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	461871	10/16/19 20:34	PEM	TAL PEN
Total/NA	Prep	3520C			1043.8 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 15:16	VC1	TAL PEN
Total/NA	Prep	3520C			1043.8 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 17:17	DS	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 14:46	KLR	TAL PEN

Client Sample ID: MW11-ROX-100419

Date Collected: 10/04/19 10:35
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-4
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	461871	10/17/19 01:53	PEM	TAL PEN
Total/NA	Prep	3520C			1037.2 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 15:41	VC1	TAL PEN
Total/NA	Prep	3520C			1037.2 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 18:36	DS	TAL PEN
Total/NA	Prep	8011			36.1 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 20:10	KLR	TAL PEN

Client Sample ID: MW28-ROX-100419

Date Collected: 10/04/19 11:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-5
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	461871	10/17/19 02:20	PEM	TAL PEN
Total/NA	Prep	3520C			1041.4 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 16:07	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177567-1

Client Sample ID: MW28-ROX-100419

Date Collected: 10/04/19 11:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1041.4 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 18:52	DS	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 20:33	KLR	TAL PEN

Client Sample ID: MW12-ROX-100419

Date Collected: 10/04/19 12:40
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-6
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	461871	10/17/19 02:46	PEM	TAL PEN
Total/NA	Prep	3520C			1039.2 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 16:32	VC1	TAL PEN
Total/NA	Prep	3520C			1039.2 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 19:08	DS	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 20:56	KLR	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-460502/1-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	460502	10/08/19 08:59	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 13:14	KLR	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-460952/1-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 11:28	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462131	10/18/19 14:23	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-461871/4
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	461871	10/16/19 19:39	PEM	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-461910/4
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	461910	10/17/19 08:19	RS	TAL PEN

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

Lab Sample ID: LCS 400-460502/2-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	460502	10/08/19 08:59	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 13:37	KLR	TAL PEN

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

Lab Sample ID: LCS 400-460952/2-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 11:53	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462131	10/18/19 14:39	DS	TAL PEN

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

Lab Sample ID: LCS 400-460952/4-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 12:44	VC1	TAL PEN

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

Lab Sample ID: LCS 400-461871/1002
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	461871	10/16/19 18:33	PEM	TAL PEN

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

Lab Sample ID: LCS 400-461910/1002
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	461910	10/17/19 07:20	RS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-460952/3-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 12:19	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462131	10/18/19 14:55	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-460952/5-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	460952	10/10/19 10:33	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 13:09	VC1	TAL PEN

Client Sample ID: P54-ROX-100419

Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	461871	10/16/19 21:01	PEM	TAL PEN
Total/NA	Prep	3520C			1032 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 14:25	VC1	TAL PEN
Total/NA	Prep	3520C			1032 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462131	10/18/19 17:33	DS	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 14:00	KLR	TAL PEN

Client Sample ID: P54-ROX-100419

Date Collected: 10/04/19 09:20
Date Received: 10/05/19 08:18

Lab Sample ID: 400-177567-3 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	461871	10/16/19 21:28	PEM	TAL PEN
Total/NA	Prep	3520C			1127.4 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462116	10/18/19 14:50	VC1	TAL PEN
Total/NA	Prep	3520C			1127.4 mL	1 mL	460952	10/10/19 18:40	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462131	10/18/19 17:49	DS	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	460502	10/08/19 09:00	KLR	TAL PEN
Total/NA	Analysis	8011		1			460564	10/08/19 14:23	KLR	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 461871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-1	TB-ROX-100419-8260	Total/NA	Water	8260B	
400-177567-3	P54-ROX-100419	Total/NA	Water	8260B	
400-177567-4	MW11-ROX-100419	Total/NA	Water	8260B	
400-177567-5	MW28-ROX-100419	Total/NA	Water	8260B	
400-177567-6	MW12-ROX-100419	Total/NA	Water	8260B	
MB 400-461871/4	Method Blank	Total/NA	Water	8260B	
LCS 400-461871/1002	Lab Control Sample	Total/NA	Water	8260B	
400-177567-3 MS	P54-ROX-100419	Total/NA	Water	8260B	
400-177567-3 MSD	P54-ROX-100419	Total/NA	Water	8260B	

Analysis Batch: 461910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-1 - RA	TB-ROX-100419-8260	Total/NA	Water	8260B	
MB 400-461910/4	Method Blank	Total/NA	Water	8260B	
LCS 400-461910/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 460952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-3	P54-ROX-100419	Total/NA	Water	3520C	
400-177567-4	MW11-ROX-100419	Total/NA	Water	3520C	
400-177567-5	MW28-ROX-100419	Total/NA	Water	3520C	
400-177567-6	MW12-ROX-100419	Total/NA	Water	3520C	
MB 400-460952/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-460952/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-460952/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-460952/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-460952/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-177567-3 MS	P54-ROX-100419	Total/NA	Water	3520C	
400-177567-3 MSD	P54-ROX-100419	Total/NA	Water	3520C	

Analysis Batch: 462116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-3	P54-ROX-100419	Total/NA	Water	8270D	460952
400-177567-4	MW11-ROX-100419	Total/NA	Water	8270D	460952
400-177567-5	MW28-ROX-100419	Total/NA	Water	8270D	460952
400-177567-6	MW12-ROX-100419	Total/NA	Water	8270D	460952
MB 400-460952/1-A	Method Blank	Total/NA	Water	8270D	460952
LCS 400-460952/2-A	Lab Control Sample	Total/NA	Water	8270D	460952
LCS 400-460952/4-A	Lab Control Sample	Total/NA	Water	8270D	460952
LCSD 400-460952/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	460952
LCSD 400-460952/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	460952
400-177567-3 MS	P54-ROX-100419	Total/NA	Water	8270D	460952
400-177567-3 MSD	P54-ROX-100419	Total/NA	Water	8270D	460952

Analysis Batch: 462131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-3	P54-ROX-100419	Total/NA	Water	8270D LL	460952
400-177567-4	MW11-ROX-100419	Total/NA	Water	8270D LL	460952
400-177567-5	MW28-ROX-100419	Total/NA	Water	8270D LL	460952

GC/MS Semi VOA (Continued)

Analysis Batch: 462131 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-6	MW12-ROX-100419	Total/NA	Water	8270D LL	460952
MB 400-460952/1-A	Method Blank	Total/NA	Water	8270D LL	460952
LCS 400-460952/2-A	Lab Control Sample	Total/NA	Water	8270D LL	460952
LCSD 400-460952/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	460952
400-177567-3 MS	P54-ROX-100419	Total/NA	Water	8270D LL	460952
400-177567-3 MSD	P54-ROX-100419	Total/NA	Water	8270D LL	460952

GC Semi VOA

Prep Batch: 460502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-2	TB-ROX-100419-8011	Total/NA	Water	8011	
400-177567-3	P54-ROX-100419	Total/NA	Water	8011	
400-177567-4	MW11-ROX-100419	Total/NA	Water	8011	
400-177567-5	MW28-ROX-100419	Total/NA	Water	8011	
400-177567-6	MW12-ROX-100419	Total/NA	Water	8011	
MB 400-460502/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-460502/2-A	Lab Control Sample	Total/NA	Water	8011	
400-177567-3 MS	P54-ROX-100419	Total/NA	Water	8011	
400-177567-3 MSD	P54-ROX-100419	Total/NA	Water	8011	

Analysis Batch: 460564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177567-2	TB-ROX-100419-8011	Total/NA	Water	8011	460502
400-177567-3	P54-ROX-100419	Total/NA	Water	8011	460502
400-177567-4	MW11-ROX-100419	Total/NA	Water	8011	460502
400-177567-5	MW28-ROX-100419	Total/NA	Water	8011	460502
400-177567-6	MW12-ROX-100419	Total/NA	Water	8011	460502
MB 400-460502/1-A	Method Blank	Total/NA	Water	8011	460502
LCS 400-460502/2-A	Lab Control Sample	Total/NA	Water	8011	460502
400-177567-3 MS	P54-ROX-100419	Total/NA	Water	8011	460502
400-177567-3 MSD	P54-ROX-100419	Total/NA	Water	8011	460502

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

Lab Sample ID: MB 400-461871/4
Matrix: Water
Analysis Batch: 461871

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/16/19 19:39	1
Acrolein	ND		20	10	ug/L			10/16/19 19:39	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/19 19:39	1
Benzene	ND		1.0	0.38	ug/L			10/16/19 19:39	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/19 19:39	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/19 19:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Bromoform	ND		5.0	0.71	ug/L			10/16/19 19:39	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/19 19:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/19 19:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/19 19:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/19 19:39	1
Chloroform	ND		1.0	0.60	ug/L			10/16/19 19:39	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/16/19 19:39	1
Chloromethane	ND		1.0	0.83	ug/L			10/16/19 19:39	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 19:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/19 19:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/19 19:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/19 19:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/19 19:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/19 19:39	1
2-Hexanone	ND		25	3.1	ug/L			10/16/19 19:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/19 19:39	1
Methylene bromide	ND		5.0	0.59	ug/L			10/16/19 19:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/19 19:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/19 19:39	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/16/19 19:39	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/16/19 19:39	1
Naphthalene	ND		1.0	1.0	ug/L			10/16/19 19:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/19 19:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/19 19:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/19 19:39	1
o-Xylene	ND		5.0	0.60	ug/L			10/16/19 19:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/19 19:39	1

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

Lab Sample ID: MB 400-461871/4
Matrix: Water
Analysis Batch: 461871

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/19 19:39	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/16/19 19:39	1
Styrene	ND		1.0	1.0	ug/L			10/16/19 19:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/19 19:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/16/19 19:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/16/19 19:39	1
Toluene	ND		1.0	0.41	ug/L			10/16/19 19:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/19 19:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/16/19 19:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/19 19:39	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/16/19 19:39	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/16/19 19:39	1
Trichloroethene	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/16/19 19:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/19 19:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/19 19:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/19 19:39	1
Vinyl acetate	ND		25	2.0	ug/L			10/16/19 19:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/19 19:39	1
Xylenes, Total	ND		10	1.6	ug/L			10/16/19 19:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*10/16/19 19:39*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*10/16/19 19:39*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/16/19 19:39*	*1*

Lab Sample ID: LCS 400-461871/1002
Matrix: Water
Analysis Batch: 461871

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	197		ug/L		99	43 - 160
Acrolein	500	396		ug/L		79	38 - 160
Acrylonitrile	500	501		ug/L		100	64 - 142
Benzene	50.0	55.5		ug/L		111	70 - 130
Bromobenzene	50.0	53.3		ug/L		107	70 - 132
Bromochloromethane	50.0	50.7		ug/L		101	70 - 130
Bromodichloromethane	50.0	49.1		ug/L		98	67 - 133
Bromoform	50.0	40.0		ug/L		80	57 - 140
Bromomethane	50.0	48.3		ug/L		97	10 - 160
2-Butanone (MEK)	200	203		ug/L		101	61 - 145
Carbon disulfide	50.0	54.4		ug/L		109	61 - 137
Carbon tetrachloride	50.0	40.3		ug/L		81	61 - 137
Chlorobenzene	50.0	55.0		ug/L		110	70 - 130
Dibromochloromethane	50.0	44.2		ug/L		88	67 - 135
Chloroethane	50.0	51.9		ug/L		104	55 - 141

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

Lab Sample ID: LCS 400-461871/1002
Matrix: Water
Analysis Batch: 461871

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	18.8		ug/L		38	10 - 160
Chloroform	50.0	54.8		ug/L		110	69 - 130
1-Chlorohexane	50.0	62.4		ug/L		125	69 - 130
Chloromethane	50.0	59.2		ug/L		118	58 - 137
cis-1,2-Dichloroethene	50.0	53.5		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	69 - 132
1,2-Dichlorobenzene	50.0	54.1		ug/L		108	67 - 130
1,3-Dichlorobenzene	50.0	55.7		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	55.4		ug/L		111	70 - 130
Dichlorodifluoromethane	50.0	45.9		ug/L		92	41 - 146
1,1-Dichloroethane	50.0	55.5		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	54.0		ug/L		108	69 - 130
1,1-Dichloroethene	50.0	48.5		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	54.2		ug/L		108	70 - 130
1,3-Dichloropropane	50.0	54.0		ug/L		108	70 - 130
2,2-Dichloropropane	50.0	32.0		ug/L		64	52 - 135
1,1-Dichloropropene	50.0	59.9		ug/L		120	70 - 130
Ethylbenzene	50.0	57.3		ug/L		115	70 - 130
Ethyl methacrylate	50.0	44.0		ug/L		88	68 - 130
Hexachlorobutadiene	50.0	54.8		ug/L		110	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	59.0		ug/L		118	70 - 130
Methylene bromide	50.0	51.9		ug/L		104	70 - 130
Methylene Chloride	50.0	51.4		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	215		ug/L		107	69 - 138
Methyl tert-butyl ether	50.0	44.2		ug/L		88	66 - 130
m-Xylene & p-Xylene	50.0	57.3		ug/L		115	70 - 130
Naphthalene	50.0	45.9		ug/L		92	47 - 149
n-Butylbenzene	50.0	62.0		ug/L		124	67 - 130
N-Propylbenzene	50.0	61.8		ug/L		124	70 - 130
o-Chlorotoluene	50.0	59.9		ug/L		120	70 - 130
o-Xylene	50.0	56.9		ug/L		114	70 - 130
p-Chlorotoluene	50.0	59.6		ug/L		119	70 - 130
p-Isopropyltoluene	50.0	61.3		ug/L		123	65 - 130
sec-Butylbenzene	50.0	62.7		ug/L		125	66 - 130
Styrene	50.0	55.3		ug/L		111	70 - 130
tert-Butylbenzene	50.0	62.7		ug/L		125	64 - 139
1,1,1,2-Tetrachloroethane	50.0	41.8		ug/L		84	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.4		ug/L		105	70 - 131
Tetrachloroethene	50.0	54.6		ug/L		109	65 - 130
Toluene	50.0	56.4		ug/L		113	70 - 130
trans-1,2-Dichloroethene	50.0	55.0		ug/L		110	70 - 130
trans-1,3-Dichloropropene	50.0	39.9		ug/L		80	63 - 130
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	46.6		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	50.8		ug/L		102	70 - 130
Trichloroethene	50.0	57.4		ug/L		115	70 - 130
Trichlorofluoromethane	50.0	53.3		ug/L		107	65 - 138

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

Lab Sample ID: LCS 400-461871/1002
Matrix: Water
Analysis Batch: 461871

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	51.8		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	50.0	61.1		ug/L		122	70 - 130
1,3,5-Trimethylbenzene	50.0	61.1		ug/L		122	69 - 130
Vinyl acetate	100	81.4		ug/L		81	26 - 160
Vinyl chloride	50.0	50.7		ug/L		101	59 - 136
Xylenes, Total	100	114		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 461871

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F1	200	65.0	F1	ug/L		32	43 - 150
Acrolein	ND		500	419		ug/L		84	38 - 150
Acrylonitrile	ND		500	516		ug/L		103	62 - 149
Benzene	ND		50.0	56.7		ug/L		113	56 - 142
Bromobenzene	ND		50.0	49.2		ug/L		98	59 - 136
Bromochloromethane	ND		50.0	52.3		ug/L		105	64 - 140
Bromodichloromethane	ND		50.0	49.5		ug/L		99	59 - 143
Bromoform	ND		50.0	41.1		ug/L		82	50 - 140
Bromomethane	ND		50.0	56.3		ug/L		113	10 - 150
2-Butanone (MEK)	ND	F1	200	98.9	F1	ug/L		49	55 - 150
Carbon disulfide	ND		50.0	58.9		ug/L		118	48 - 150
Carbon tetrachloride	ND		50.0	43.9		ug/L		88	55 - 145
Chlorobenzene	ND		50.0	53.7		ug/L		107	64 - 130
Dibromochloromethane	ND		50.0	45.3		ug/L		91	56 - 143
Chloroethane	ND		50.0	59.9		ug/L		120	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	56.7		ug/L		113	60 - 141
1-Chlorohexane	ND		50.0	59.2		ug/L		118	56 - 136
Chloromethane	ND		50.0	67.4		ug/L		135	49 - 148
cis-1,2-Dichloroethene	ND		50.0	55.0		ug/L		110	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.5		ug/L		93	57 - 140
1,2-Dichlorobenzene	ND		50.0	49.9		ug/L		100	52 - 137
1,3-Dichlorobenzene	ND		50.0	50.5		ug/L		101	54 - 135
1,4-Dichlorobenzene	ND		50.0	50.5		ug/L		101	53 - 135
Dichlorodifluoromethane	ND		50.0	56.0		ug/L		112	16 - 150
1,1-Dichloroethane	ND		50.0	57.8		ug/L		116	61 - 144
1,2-Dichloroethane	ND		50.0	54.0		ug/L		108	60 - 141
1,1-Dichloroethene	ND		50.0	54.2		ug/L		108	54 - 147
1,2-Dichloropropane	ND		50.0	54.7		ug/L		109	66 - 137
1,3-Dichloropropane	ND		50.0	54.0		ug/L		108	66 - 133
2,2-Dichloropropane	ND		50.0	35.6		ug/L		71	42 - 144

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

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 461871

Client Sample ID: P54-ROX-100419
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	62.1		ug/L		124	65 - 136
Ethylbenzene	ND		50.0	54.4		ug/L		109	58 - 131
Ethyl methacrylate	ND		50.0	42.4		ug/L		85	64 - 130
Hexachlorobutadiene	ND		50.0	47.4		ug/L		95	31 - 149
2-Hexanone	ND	F1	200	111	F1	ug/L		56	65 - 140
Isopropylbenzene	ND		50.0	54.5		ug/L		109	56 - 133
Methylene bromide	ND		50.0	52.5		ug/L		105	63 - 138
Methylene Chloride	ND		50.0	54.0		ug/L		108	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	186		ug/L		93	63 - 146
Methyl tert-butyl ether	ND		50.0	44.6		ug/L		89	59 - 137
m-Xylene & p-Xylene	ND		50.0	53.5		ug/L		107	57 - 130
Naphthalene	ND		50.0	42.4		ug/L		85	25 - 150
n-Butylbenzene	ND		50.0	55.7		ug/L		111	41 - 142
N-Propylbenzene	ND		50.0	55.3		ug/L		111	51 - 138
o-Chlorotoluene	ND		50.0	54.7		ug/L		109	53 - 134
o-Xylene	ND		50.0	53.4		ug/L		107	61 - 130
p-Chlorotoluene	ND		50.0	53.5		ug/L		107	54 - 133
p-Isopropyltoluene	ND		50.0	54.0		ug/L		108	48 - 139
sec-Butylbenzene	ND		50.0	56.3		ug/L		113	50 - 138
Styrene	ND		50.0	52.4		ug/L		105	58 - 131
tert-Butylbenzene	ND		50.0	57.4		ug/L		115	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	41.6		ug/L		83	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	52.0		ug/L		104	66 - 135
Tetrachloroethene	ND		50.0	53.4		ug/L		107	52 - 133
Toluene	ND		50.0	55.4		ug/L		111	65 - 130
trans-1,2-Dichloroethene	ND		50.0	58.7		ug/L		117	61 - 143
trans-1,3-Dichloropropene	ND		50.0	38.2		ug/L		76	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	45.3		ug/L		91	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	46.1		ug/L		92	39 - 148
1,1,1-Trichloroethane	ND		50.0	49.8		ug/L		100	57 - 142
1,1,2-Trichloroethane	ND		50.0	51.9		ug/L		104	66 - 131
Trichloroethene	ND		50.0	58.9		ug/L		118	64 - 136
Trichlorofluoromethane	ND		50.0	60.8		ug/L		122	54 - 150
1,2,3-Trichloropropane	ND		50.0	52.5		ug/L		105	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	54.9		ug/L		110	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	55.4		ug/L		111	52 - 135
Vinyl acetate	ND		100	84.5		ug/L		85	26 - 150
Vinyl chloride	ND		50.0	60.1		ug/L		120	46 - 150
Xylenes, Total	ND		100	107		ug/L		107	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 461871

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F1	200	60.4	F1	ug/L		30	43 - 150	7	30
Acrolein	ND		500	385		ug/L		77	38 - 150	8	31
Acrylonitrile	ND		500	476		ug/L		95	62 - 149	8	30
Benzene	ND		50.0	53.2		ug/L		106	56 - 142	6	30
Bromobenzene	ND		50.0	46.6		ug/L		93	59 - 136	5	30
Bromochloromethane	ND		50.0	48.9		ug/L		98	64 - 140	7	30
Bromodichloromethane	ND		50.0	47.3		ug/L		95	59 - 143	4	30
Bromoform	ND		50.0	41.0		ug/L		82	50 - 140	0	30
Bromomethane	ND		50.0	48.6		ug/L		97	10 - 150	15	50
2-Butanone (MEK)	ND	F1	200	90.3	F1	ug/L		45	55 - 150	9	30
Carbon disulfide	ND		50.0	52.0		ug/L		104	48 - 150	13	30
Carbon tetrachloride	ND		50.0	43.6		ug/L		87	55 - 145	1	30
Chlorobenzene	ND		50.0	50.6		ug/L		101	64 - 130	6	30
Dibromochloromethane	ND		50.0	44.6		ug/L		89	56 - 143	2	30
Chloroethane	ND		50.0	51.5		ug/L		103	50 - 150	15	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	52.7		ug/L		105	60 - 141	7	30
1-Chlorohexane	ND		50.0	54.6		ug/L		109	56 - 136	8	30
Chloromethane	ND		50.0	60.0		ug/L		120	49 - 148	12	31
cis-1,2-Dichloroethene	ND		50.0	51.7		ug/L		103	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	45.2		ug/L		90	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	45.7		ug/L		91	52 - 137	9	30
1,3-Dichlorobenzene	ND		50.0	47.3		ug/L		95	54 - 135	6	30
1,4-Dichlorobenzene	ND		50.0	45.4		ug/L		91	53 - 135	11	30
Dichlorodifluoromethane	ND		50.0	48.9		ug/L		98	16 - 150	14	31
1,1-Dichloroethane	ND		50.0	53.8		ug/L		108	61 - 144	7	30
1,2-Dichloroethane	ND		50.0	50.6		ug/L		101	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	50.3		ug/L		101	54 - 147	7	30
1,2-Dichloropropane	ND		50.0	52.1		ug/L		104	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	50.0		ug/L		100	66 - 133	8	30
2,2-Dichloropropane	ND		50.0	36.6		ug/L		73	42 - 144	3	31
1,1-Dichloropropene	ND		50.0	57.5		ug/L		115	65 - 136	8	30
Ethylbenzene	ND		50.0	51.4		ug/L		103	58 - 131	6	30
Ethyl methacrylate	ND		50.0	42.0		ug/L		84	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	41.8		ug/L		84	31 - 149	13	36
2-Hexanone	ND	F1	200	108	F1	ug/L		54	65 - 140	3	30
Isopropylbenzene	ND		50.0	50.8		ug/L		102	56 - 133	7	30
Methylene bromide	ND		50.0	49.6		ug/L		99	63 - 138	6	30
Methylene Chloride	ND		50.0	50.1		ug/L		100	60 - 146	7	32
4-Methyl-2-pentanone (MIBK)	ND		200	171		ug/L		85	63 - 146	8	30
Methyl tert-butyl ether	ND		50.0	43.0		ug/L		86	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	50.4		ug/L		101	57 - 130	6	30
Naphthalene	ND		50.0	43.9		ug/L		88	25 - 150	4	30
n-Butylbenzene	ND		50.0	48.2		ug/L		96	41 - 142	14	31
N-Propylbenzene	ND		50.0	51.1		ug/L		102	51 - 138	8	30
o-Chlorotoluene	ND		50.0	51.2		ug/L		102	53 - 134	7	30
o-Xylene	ND		50.0	50.8		ug/L		102	61 - 130	5	30
p-Chlorotoluene	ND		50.0	50.3		ug/L		101	54 - 133	6	30

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

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 461871

Client Sample ID: P54-ROX-100419
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	49.0		ug/L		98	48 - 139	10	30
sec-Butylbenzene	ND		50.0	51.3		ug/L		103	50 - 138	9	30
Styrene	ND		50.0	49.2		ug/L		98	58 - 131	6	30
tert-Butylbenzene	ND		50.0	53.1		ug/L		106	54 - 146	8	30
1,1,1,2-Tetrachloroethane	ND		50.0	42.3		ug/L		85	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	50.0		ug/L		100	66 - 135	4	30
Tetrachloroethene	ND		50.0	49.7		ug/L		99	52 - 133	7	30
Toluene	ND		50.0	52.6		ug/L		105	65 - 130	5	30
trans-1,2-Dichloroethene	ND		50.0	53.8		ug/L		108	61 - 143	9	30
trans-1,3-Dichloropropene	ND		50.0	40.5		ug/L		81	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	44.4		ug/L		89	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	43.5		ug/L		87	39 - 148	6	30
1,1,1-Trichloroethane	ND		50.0	48.1		ug/L		96	57 - 142	3	30
1,1,2-Trichloroethane	ND		50.0	48.7		ug/L		97	66 - 131	6	30
Trichloroethene	ND		50.0	53.7		ug/L		107	64 - 136	9	30
Trichlorofluoromethane	ND		50.0	54.3		ug/L		109	54 - 150	11	30
1,2,3-Trichloropropane	ND		50.0	48.8		ug/L		98	65 - 133	7	30
1,2,4-Trimethylbenzene	ND		50.0	49.6		ug/L		99	50 - 139	10	30
1,3,5-Trimethylbenzene	ND		50.0	51.8		ug/L		104	52 - 135	7	30
Vinyl acetate	ND		100	83.4		ug/L		83	26 - 150	1	33
Vinyl chloride	ND		50.0	52.6		ug/L		105	46 - 150	13	30
Xylenes, Total	ND		100	101		ug/L		101	59 - 130	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 400-461910/4
Matrix: Water
Analysis Batch: 461910

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			10/17/19 08:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/17/19 08:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/17/19 08:19*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/17/19 08:19*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/17/19 08:19*	*1*

Lab Sample ID: LCS 400-461910/1002
Matrix: Water
Analysis Batch: 461910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	50.0	42.2		ug/L		84	47 - 149
1,2,3-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 138

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

Lab Sample ID: LCS 400-461910/1002
Matrix: Water
Analysis Batch: 461910

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	91		78 - 118
Dibromofluoromethane	105		81 - 121
Toluene-d8 (Surr)	88		80 - 120

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
Benzenethiol	ND		10	1.7	ug/L		10/10/19 10:33	10/18/19 11:28	1
Benzoic acid	ND		30	7.3	ug/L		10/10/19 10:33	10/18/19 11:28	1
Benzyl alcohol	ND		10	2.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/10/19 10:33	10/18/19 11:28	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/10/19 10:33	10/18/19 11:28	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/10/19 10:33	10/18/19 11:28	1
Bis(2-ethylhexyl) phthalate	12.5		10	5.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/10/19 10:33	10/18/19 11:28	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Chloroaniline	ND		10	3.4	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Chlorophenol	ND		10	2.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Dibenzofuran	ND		10	0.52	ug/L		10/10/19 10:33	10/18/19 11:28	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Diethyl phthalate	ND		10	0.70	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/10/19 10:33	10/18/19 11:28	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/10/19 10:33	10/18/19 11:28	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/10/19 10:33	10/18/19 11:28	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/10/19 10:33	10/18/19 11:28	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/10/19 10:33	10/18/19 11:28	1
1,4-Dioxane	ND		10	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/10/19 10:33	10/18/19 11:28	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/10/19 10:33	10/18/19 11:28	1
Hexachloroethane	ND		10	4.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
Indene	ND		10	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
Isophorone	ND		10	0.57	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Methylphenol	ND		10	1.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/10/19 10:33	10/18/19 11:28	1

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
3-Nitroaniline	ND		10	1.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Nitroaniline	ND		10	2.5	ug/L		10/10/19 10:33	10/18/19 11:28	1
Nitrobenzene	ND		10	0.55	ug/L		10/10/19 10:33	10/18/19 11:28	1
2-Nitrophenol	ND		10	0.65	ug/L		10/10/19 10:33	10/18/19 11:28	1
4-Nitrophenol	ND		10	2.1	ug/L		10/10/19 10:33	10/18/19 11:28	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/10/19 10:33	10/18/19 11:28	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/10/19 10:33	10/18/19 11:28	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/10/19 10:33	10/18/19 11:28	1
Pentachlorophenol	ND		20	1.8	ug/L		10/10/19 10:33	10/18/19 11:28	1
Phenol	ND		10	2.6	ug/L		10/10/19 10:33	10/18/19 11:28	1
Pyridine	ND		10	3.2	ug/L		10/10/19 10:33	10/18/19 11:28	1
Quinoline	ND		10	6.0	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/10/19 10:33	10/18/19 11:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/10/19 10:33	10/18/19 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
Phenol-d5	*66*		*10 - 120*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
Terphenyl-d14	*84*		*53 - 125*	*10/10/19 10:33*	*10/18/19 11:28*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*10/10/19 10:33*	*10/18/19 11:28*	*1*

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	24.6		ug/L		82	29 - 120
Benzoic acid	117	94.4		ug/L		81	10 - 150
Benzyl alcohol	30.0	22.1		ug/L		74	19 - 125
Bis(2-chloroethoxy)methane	30.0	25.0		ug/L		83	45 - 120
Bis(2-chloroethyl)ether	30.0	22.4		ug/L		75	48 - 120
bis (2-chloroisopropyl) ether	30.0	24.0		ug/L		80	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	24.1		ug/L		80	48 - 150
4-Bromophenyl phenyl ether	30.0	21.9		ug/L		73	55 - 122
Butyl benzyl phthalate	30.0	23.8		ug/L		79	46 - 145
4-Chloroaniline	30.0	23.0		ug/L		77	30 - 120
4-Chloro-3-methylphenol	30.0	24.5		ug/L		82	39 - 140
2-Chloronaphthalene	30.0	20.9		ug/L		70	52 - 120
2-Chlorophenol	30.0	20.3		ug/L		68	34 - 120
4-Chlorophenyl phenyl ether	30.0	20.7		ug/L		69	58 - 124
Dibenz[a,h]acridine	30.0	22.3		ug/L		74	46 - 149
Dibenzofuran	30.0	21.4		ug/L		71	58 - 123
3,3'-Dichlorobenzidine	40.0	39.6		ug/L		99	39 - 135
2,4-Dichlorophenol	30.0	24.0		ug/L		80	39 - 128
Diethyl phthalate	30.0	26.4		ug/L		88	44 - 146

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

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	30.0	24.5		ug/L		82	44 - 120
Dimethyl phthalate	30.0	24.7		ug/L		82	50 - 131
Di-n-butyl phthalate	30.0	24.0		ug/L		80	55 - 131
4,6-Dinitro-ortho-cresol	60.0	61.2		ug/L		102	10 - 150
2,4-Dinitrophenol	60.0	59.7		ug/L		100	10 - 150
2,4-Dinitrotoluene	30.0	25.2		ug/L		84	58 - 140
2,6-Dinitrotoluene	30.0	25.4		ug/L		85	57 - 130
Di-n-octyl phthalate	30.0	25.2		ug/L		84	50 - 150
1,4-Dioxane	30.0	15.9		ug/L		53	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.2		ug/L		77	47 - 123
Hexachlorobenzene	30.0	20.8		ug/L		69	52 - 131
Hexachlorocyclopentadiene	30.0	5.60	J	ug/L		19	10 - 129
Hexachloroethane	30.0	13.0		ug/L		43	41 - 120
Indene	30.0	22.7		ug/L		76	47 - 120
Isophorone	30.0	24.4		ug/L		81	49 - 120
2-Methylphenol	30.0	26.5		ug/L		88	39 - 123
3 & 4 Methylphenol	30.0	24.3		ug/L		81	38 - 121
2-Nitroaniline	30.0	26.8		ug/L		89	47 - 150
3-Nitroaniline	30.0	24.2		ug/L		81	34 - 132
4-Nitroaniline	30.0	28.2		ug/L		94	41 - 135
Nitrobenzene	30.0	23.7		ug/L		79	47 - 120
2-Nitrophenol	30.0	24.7		ug/L		82	28 - 136
4-Nitrophenol	60.0	57.6		ug/L		96	10 - 150
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148
N-Nitrosodi-n-propylamine	30.0	27.1		ug/L		90	44 - 120
N-Nitrosodiphenylamine	29.8	25.7		ug/L		86	56 - 120
Pentachlorophenol	60.0	50.1		ug/L		84	15 - 141
Phenol	30.0	21.0		ug/L		70	33 - 120
Pyridine	60.0	35.6		ug/L		59	26 - 120
Quinoline	30.0	23.2		ug/L		77	51 - 129
2,4,5-Trichlorophenol	30.0	24.9		ug/L		83	38 - 147
2,4,6-Trichlorophenol	30.0	24.6		ug/L		82	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Phenol-d5	*73*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*
2,4,6-Tribromophenol	*74*		*15 - 135*

Lab Sample ID: LCS 400-460952/4-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		1	10 - 120

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

Lab Sample ID: LCS 400-460952/4-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	86		34 - 120
2-Fluorophenol	51		10 - 120
Nitrobenzene-d5	78		27 - 120
Phenol-d5	73		10 - 120
Terphenyl-d14	87		53 - 125
2,4,6-Tribromophenol	72		15 - 135

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	22.3		ug/L		74	29 - 120	10	30
Benzoic acid	117	94.6		ug/L		81	10 - 150	0	30
Benzyl alcohol	30.0	22.2		ug/L		74	19 - 125	1	30
Bis(2-chloroethoxy)methane	30.0	24.8		ug/L		83	45 - 120	1	30
Bis(2-chloroethyl)ether	30.0	25.9		ug/L		86	48 - 120	15	30
bis (2-chloroisopropyl) ether	30.0	24.7		ug/L		82	30 - 125	3	30
Bis(2-ethylhexyl) phthalate	30.0	36.3	*	ug/L		121	48 - 150	40	30
4-Bromophenyl phenyl ether	30.0	24.9		ug/L		83	55 - 122	13	30
Butyl benzyl phthalate	30.0	27.1		ug/L		90	46 - 145	13	30
4-Chloroaniline	30.0	22.4		ug/L		75	30 - 120	2	30
4-Chloro-3-methylphenol	30.0	24.1		ug/L		80	39 - 140	2	30
2-Chloronaphthalene	30.0	23.2		ug/L		77	52 - 120	11	30
2-Chlorophenol	30.0	21.8		ug/L		73	34 - 120	7	30
4-Chlorophenyl phenyl ether	30.0	23.7		ug/L		79	58 - 124	14	30
Dibenz[a,h]acridine	30.0	26.7		ug/L		89	46 - 149	18	30
Dibenzofuran	30.0	23.9		ug/L		80	58 - 123	11	30
3,3'-Dichlorobenzidine	40.0	41.7		ug/L		104	39 - 135	5	30
2,4-Dichlorophenol	30.0	23.9		ug/L		80	39 - 128	0	30
Diethyl phthalate	30.0	27.5		ug/L		92	44 - 146	4	30
2,4-Dimethylphenol	30.0	23.8		ug/L		79	44 - 120	3	30
Dimethyl phthalate	30.0	25.4		ug/L		85	50 - 131	3	30
Di-n-butyl phthalate	30.0	28.5		ug/L		95	55 - 131	17	30
4,6-Dinitro-ortho-cresol	60.0	61.9		ug/L		103	10 - 150	1	30
2,4-Dinitrophenol	60.0	61.4		ug/L		102	10 - 150	3	30
2,4-Dinitrotoluene	30.0	26.0		ug/L		87	58 - 140	3	30
2,6-Dinitrotoluene	30.0	25.9		ug/L		86	57 - 130	2	30
Di-n-octyl phthalate	30.0	29.4		ug/L		98	50 - 150	15	30
1,4-Dioxane	30.0	17.7		ug/L		59	25 - 120	11	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.9		ug/L		86	47 - 123	11	30
Hexachlorobenzene	30.0	24.0		ug/L		80	52 - 131	14	30
Hexachlorocyclopentadiene	30.0	5.46	J	ug/L		18	10 - 129	3	30
Hexachloroethane	30.0	15.8		ug/L		53	41 - 120	20	30
Indene	30.0	22.6		ug/L		75	47 - 120	0	30
Isophorone	30.0	24.4		ug/L		81	49 - 120	0	30
2-Methylphenol	30.0	27.3		ug/L		91	39 - 123	3	30
3 & 4 Methylphenol	30.0	24.9		ug/L		83	38 - 121	3	30

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

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	30.0	26.7		ug/L		89	47 - 150	0	30
3-Nitroaniline	30.0	24.4		ug/L		81	34 - 132	1	30
4-Nitroaniline	30.0	29.0		ug/L		97	41 - 135	3	30
Nitrobenzene	30.0	23.6		ug/L		79	47 - 120	0	30
2-Nitrophenol	30.0	25.7		ug/L		86	28 - 136	4	30
4-Nitrophenol	60.0	58.5		ug/L		98	10 - 150	2	30
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148	0	30
N-Nitrosodi-n-propylamine	30.0	26.6		ug/L		89	44 - 120	2	30
N-Nitrosodiphenylamine	29.8	27.1		ug/L		91	56 - 120	5	30
Pentachlorophenol	60.0	52.1		ug/L		87	15 - 141	4	30
Phenol	30.0	21.9		ug/L		73	33 - 120	4	30
Pyridine	60.0	40.2		ug/L		67	26 - 120	12	30
Quinoline	30.0	23.3		ug/L		78	51 - 129	1	30
2,4,5-Trichlorophenol	30.0	25.6		ug/L		85	38 - 147	3	30
2,4,6-Trichlorophenol	30.0	25.2		ug/L		84	36 - 139	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*83*		*27 - 120*
Phenol-d5	*73*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*78*		*15 - 135*

Lab Sample ID: LCSD 400-460952/5-A
Matrix: Water
Analysis Batch: 462116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	40	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*34 - 120*
2-Fluorophenol	*63*		*10 - 120*
Nitrobenzene-d5	*71*		*27 - 120*
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*82*		*53 - 125*
2,4,6-Tribromophenol	*65*		*15 - 135*

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 462116

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		29.1	20.5		ug/L		70	10 - 143
Benzoic acid	ND		113	97.1		ug/L		86	10 - 134
Benzyl alcohol	ND		29.1	21.4		ug/L		74	10 - 154
Bis(2-chloroethoxy)methane	ND		29.1	24.1		ug/L		83	14 - 147

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

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 462116

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	ND		29.1	25.9		ug/L		89	28 - 130
bis (2-chloroisopropyl) ether	ND		29.1	25.0		ug/L		86	10 - 141
Bis(2-ethylhexyl) phthalate	ND	*	29.1	27.4		ug/L		94	43 - 160
4-Bromophenyl phenyl ether	ND		29.1	27.1		ug/L		93	26 - 159
Butyl benzyl phthalate	ND		29.1	27.4		ug/L		94	43 - 151
4-Chloroaniline	ND		29.1	21.5		ug/L		74	10 - 152
4-Chloro-3-methylphenol	ND		29.1	24.4		ug/L		84	17 - 156
2-Chloronaphthalene	ND		29.1	26.4		ug/L		91	10 - 155
2-Chlorophenol	ND		29.1	22.3		ug/L		77	19 - 130
4-Chlorophenyl phenyl ether	ND		29.1	25.9		ug/L		89	25 - 161
Dibenz[a,h]acridine	ND		29.1	25.6		ug/L		88	42 - 147
Dibenzofuran	ND		29.1	26.2		ug/L		90	18 - 157
3,3'-Dichlorobenzidine	ND		38.8	38.6		ug/L		100	10 - 172
2,4-Dichlorophenol	ND		29.1	23.7		ug/L		81	16 - 147
Diethyl phthalate	ND		29.1	27.9		ug/L		96	23 - 160
2,4-Dimethylphenol	ND		29.1	24.0		ug/L		82	25 - 146
Dimethyl phthalate	ND		29.1	26.0		ug/L		89	11 - 158
Di-n-butyl phthalate	ND		29.1	28.8		ug/L		99	28 - 162
4,6-Dinitro-ortho-cresol	ND		58.1	64.1		ug/L		110	10 - 168
2,4-Dinitrophenol	ND		58.1	64.5		ug/L		111	10 - 166
2,4-Dinitrotoluene	ND		29.1	27.5		ug/L		95	26 - 158
2,6-Dinitrotoluene	ND		29.1	26.8		ug/L		92	19 - 157
Di-n-octyl phthalate	ND		29.1	28.1		ug/L		97	42 - 150
1,4-Dioxane	ND		29.1	17.5		ug/L		60	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		29.1	27.7		ug/L		95	19 - 162
Hexachlorobenzene	ND		29.1	26.0		ug/L		90	45 - 145
Hexachlorocyclopentadiene	ND		29.1	16.0	J	ug/L		55	10 - 151
Hexachloroethane	ND		29.1	23.7		ug/L		82	29 - 130
Indene	ND		29.1	25.3		ug/L		87	22 - 130
Isophorone	ND		29.1	23.4		ug/L		80	24 - 144
2-Methylphenol	ND		29.1	28.0		ug/L		96	22 - 130
3 & 4 Methylphenol	ND		29.1	25.2		ug/L		87	31 - 130
2-Nitroaniline	ND		29.1	27.3		ug/L		94	10 - 162
3-Nitroaniline	ND		29.1	25.4		ug/L		87	10 - 163
4-Nitroaniline	ND		29.1	29.7		ug/L		102	10 - 162
Nitrobenzene	ND		29.1	23.1		ug/L		80	34 - 135
2-Nitrophenol	ND		29.1	25.5		ug/L		88	27 - 134
4-Nitrophenol	ND		58.1	58.5		ug/L		101	10 - 175
N-Nitrosodimethylamine	ND		29.1	26.4		ug/L		91	10 - 139
N-Nitrosodi-n-propylamine	ND		29.1	27.6		ug/L		95	13 - 147
N-Nitrosodiphenylamine	ND		28.8	26.4		ug/L		92	31 - 150
Pentachlorophenol	ND		58.1	57.0		ug/L		98	10 - 180
Phenol	ND		29.1	22.0		ug/L		76	23 - 130
Pyridine	ND		58.1	40.0		ug/L		69	10 - 130
Quinoline	ND		29.1	22.3		ug/L		77	10 - 180
2,4,5-Trichlorophenol	ND		29.1	26.9		ug/L		93	43 - 137
2,4,6-Trichlorophenol	ND		29.1	25.4		ug/L		87	42 - 135

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

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 462116

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	95		34 - 120
2-Fluorophenol	54		10 - 120
Nitrobenzene-d5	89		27 - 120
Phenol-d5	72		10 - 120
Terphenyl-d14	90		53 - 125
2,4,6-Tribromophenol	83		15 - 135

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 462116

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		26.6	22.4		ug/L		84	10 - 143	9	63
Benzoic acid	ND		103	90.7		ug/L		88	10 - 134	7	49
Benzyl alcohol	ND		26.6	21.4		ug/L		80	10 - 154	0	37
Bis(2-chloroethoxy)methane	ND		26.6	24.1		ug/L		91	14 - 147	0	70
Bis(2-chloroethyl)ether	ND		26.6	23.9		ug/L		90	28 - 130	8	42
bis (2-chloroisopropyl) ether	ND		26.6	24.6		ug/L		92	10 - 141	2	41
Bis(2-ethylhexyl) phthalate	ND	*	26.6	24.6		ug/L		92	43 - 160	11	35
4-Bromophenyl phenyl ether	ND		26.6	24.9		ug/L		94	26 - 159	8	30
Butyl benzyl phthalate	ND		26.6	25.2		ug/L		95	43 - 151	8	32
4-Chloroaniline	ND		26.6	20.9		ug/L		79	10 - 152	3	94
4-Chloro-3-methylphenol	ND		26.6	21.8		ug/L		82	17 - 156	11	40
2-Chloronaphthalene	ND		26.6	25.0		ug/L		94	10 - 155	5	29
2-Chlorophenol	ND		26.6	17.6		ug/L		66	19 - 130	23	42
4-Chlorophenyl phenyl ether	ND		26.6	24.4		ug/L		92	25 - 161	6	27
Dibenz[a,h]acridine	ND		26.6	25.1		ug/L		94	42 - 147	2	40
Dibenzofuran	ND		26.6	25.3		ug/L		95	18 - 157	3	29
3,3'-Dichlorobenzidine	ND		35.5	36.8		ug/L		104	10 - 172	5	58
2,4-Dichlorophenol	ND		26.6	20.7		ug/L		78	16 - 147	14	43
Diethyl phthalate	ND		26.6	27.0		ug/L		102	23 - 160	3	40
2,4-Dimethylphenol	ND		26.6	23.2		ug/L		87	25 - 146	3	47
Dimethyl phthalate	ND		26.6	24.3		ug/L		92	11 - 158	6	36
Di-n-butyl phthalate	ND		26.6	27.0		ug/L		102	28 - 162	6	32
4,6-Dinitro-ortho-cresol	ND		53.2	58.1		ug/L		109	10 - 168	10	42
2,4-Dinitrophenol	ND		53.2	60.5		ug/L		114	10 - 166	6	36
2,4-Dinitrotoluene	ND		26.6	26.2		ug/L		98	26 - 158	5	28
2,6-Dinitrotoluene	ND		26.6	25.5		ug/L		96	19 - 157	5	28
Di-n-octyl phthalate	ND		26.6	23.9		ug/L		90	42 - 150	16	35
1,4-Dioxane	ND		26.6	16.7		ug/L		63	10 - 130	4	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		26.6	26.5		ug/L		100	19 - 162	4	40
Hexachlorobenzene	ND		26.6	23.8		ug/L		89	45 - 145	9	33
Hexachlorocyclopentadiene	ND		26.6	14.6	J	ug/L		55	10 - 151	9	50
Hexachloroethane	ND		26.6	22.2		ug/L		84	29 - 130	6	41
Indene	ND		26.6	24.9		ug/L		94	22 - 130	2	40
Isophorone	ND		26.6	23.7		ug/L		89	24 - 144	1	33
2-Methylphenol	ND		26.6	24.6		ug/L		93	22 - 130	13	47
3 & 4 Methylphenol	ND		26.6	22.2		ug/L		83	31 - 130	13	47

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

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 462116

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	ND		26.6	25.8		ug/L		97	10 - 162	6	33
3-Nitroaniline	ND		26.6	22.8		ug/L		86	10 - 163	11	39
4-Nitroaniline	ND		26.6	29.0		ug/L		109	10 - 162	2	50
Nitrobenzene	ND		26.6	23.5		ug/L		88	34 - 135	2	35
2-Nitrophenol	ND		26.6	21.8		ug/L		82	27 - 134	16	43
4-Nitrophenol	ND		53.2	53.2		ug/L		100	10 - 175	9	82
N-Nitrosodimethylamine	ND		26.6	25.1		ug/L		94	10 - 139	5	62
N-Nitrosodi-n-propylamine	ND		26.6	27.3		ug/L		102	13 - 147	1	36
N-Nitrosodiphenylamine	ND		26.4	24.1		ug/L		91	31 - 150	9	34
Pentachlorophenol	ND		53.2	53.1		ug/L		100	10 - 180	7	42
Phenol	ND		26.6	18.1		ug/L		68	23 - 130	19	52
Pyridine	ND		53.2	39.4		ug/L		74	10 - 130	1	55
Quinoline	ND		26.6	23.0		ug/L		86	10 - 180	3	40
2,4,5-Trichlorophenol	ND		26.6	23.5		ug/L		88	43 - 137	13	42
2,4,6-Trichlorophenol	ND		26.6	21.5		ug/L		81	42 - 135	17	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*97*		*27 - 120*
Phenol-d5	*67*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*
2,4,6-Tribromophenol	*77*		*15 - 135*

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Anthracene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Chrysene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Fluoranthene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Fluorene	ND		0.20	0.021	ug/L		10/10/19 10:33	10/18/19 14:23	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/10/19 10:33	10/18/19 14:23	1
Phenanthrene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
Pyrene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/10/19 10:33	10/18/19 14:23	1

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

Lab Sample ID: MB 400-460952/1-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460952

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	229	X	33 - 138	10/10/19 10:33	10/18/19 14:23	1
2-Fluorobiphenyl	107		15 - 122	10/10/19 10:33	10/18/19 14:23	1
Nitrobenzene-d5	120		19 - 130	10/10/19 10:33	10/18/19 14:23	1

Lab Sample ID: LCS 400-460952/2-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.4		ug/L		81	41 - 120
Acenaphthylene	30.0	24.1		ug/L		80	44 - 120
Anthracene	30.0	23.2		ug/L		77	49 - 120
Benzo[a]anthracene	30.0	23.1		ug/L		77	61 - 135
Benzo[a]pyrene	30.0	19.4		ug/L		65	52 - 120
Benzo[b]fluoranthene	30.0	19.6		ug/L		65	53 - 134
Benzo[g,h,i]perylene	30.0	23.2		ug/L		77	47 - 133
Benzo[k]fluoranthene	30.0	22.1		ug/L		74	57 - 134
Chrysene	30.0	23.2		ug/L		77	55 - 122
Dibenz(a,h)anthracene	30.0	26.5		ug/L		88	48 - 146
Fluoranthene	30.0	22.7		ug/L		76	54 - 128
Fluorene	30.0	27.8		ug/L		93	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.5		ug/L		82	43 - 142
Phenanthrene	30.0	23.6		ug/L		79	48 - 120
Pyrene	30.0	32.9		ug/L		110	48 - 132
1-Methylnaphthalene	30.0	17.0		ug/L		57	41 - 120
2-Methylnaphthalene	30.0	16.1		ug/L		54	32 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	119		33 - 138
2-Fluorobiphenyl	82		15 - 122
Nitrobenzene-d5	75		19 - 130

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.9		ug/L		93	41 - 120	13	56
Acenaphthylene	30.0	26.8		ug/L		89	44 - 120	11	56
Anthracene	30.0	26.1		ug/L		87	49 - 120	12	51
Benzo[a]anthracene	30.0	26.0		ug/L		87	61 - 135	12	49
Benzo[a]pyrene	30.0	23.0		ug/L		77	52 - 120	17	50
Benzo[b]fluoranthene	30.0	24.0		ug/L		80	53 - 134	20	54
Benzo[g,h,i]perylene	30.0	27.0		ug/L		90	47 - 133	15	50
Benzo[k]fluoranthene	30.0	26.9		ug/L		90	57 - 134	20	52
Chrysene	30.0	25.9		ug/L		86	55 - 122	11	50
Dibenz(a,h)anthracene	30.0	30.9		ug/L		103	48 - 146	15	50
Fluoranthene	30.0	26.1		ug/L		87	54 - 128	14	52

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

Lab Sample ID: LCSD 400-460952/3-A
Matrix: Water
Analysis Batch: 462131

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluorene	30.0	31.9		ug/L		106	45 - 125	14	56
Indeno[1,2,3-cd]pyrene	30.0	28.6		ug/L		95	43 - 142	15	51
Phenanthrene	30.0	27.2		ug/L		91	48 - 120	14	56
Pyrene	30.0	39.2		ug/L		131	48 - 132	18	52
1-Methylnaphthalene	30.0	19.5		ug/L		65	41 - 120	14	55
2-Methylnaphthalene	30.0	18.9		ug/L		63	32 - 124	16	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*125*		*33 - 138*
2-Fluorobiphenyl	*85*		*15 - 122*
Nitrobenzene-d5	*77*		*19 - 130*

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 462131

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		29.1	29.9		ug/L		103	35 - 113
Acenaphthylene	ND		29.1	28.3		ug/L		97	41 - 118
Anthracene	ND		29.1	27.4		ug/L		94	45 - 122
Benzo[a]anthracene	ND		29.1	26.8		ug/L		92	55 - 133
Benzo[a]pyrene	ND		29.1	22.5		ug/L		78	50 - 108
Benzo[b]fluoranthene	ND		29.1	21.9		ug/L		75	50 - 128
Benzo[g,h,i]perylene	ND		29.1	23.9		ug/L		82	46 - 133
Benzo[k]fluoranthene	ND		29.1	24.5		ug/L		84	52 - 128
Chrysene	ND		29.1	26.8		ug/L		92	52 - 116
Dibenz(a,h)anthracene	ND		29.1	26.1		ug/L		90	52 - 143
Fluoranthene	ND		29.1	27.7		ug/L		95	32 - 150
Fluorene	ND		29.1	34.4		ug/L		118	15 - 150
Indeno[1,2,3-cd]pyrene	ND		29.1	24.9		ug/L		86	41 - 141
Phenanthrene	ND		29.1	29.3		ug/L		101	36 - 125
Pyrene	ND	F1	29.1	41.6	F1	ug/L		143	41 - 127
1-Methylnaphthalene	0.026	J	29.1	22.0		ug/L		76	10 - 150
2-Methylnaphthalene	0.026	J	29.1	21.6		ug/L		74	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*128*		*33 - 138*
2-Fluorobiphenyl	*96*		*15 - 122*
Nitrobenzene-d5	*73*		*19 - 130*

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 462131

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		26.6	29.2		ug/L		110	35 - 113	2	49
Acenaphthylene	ND		26.6	28.4		ug/L		107	41 - 118	0	48
Anthracene	ND		26.6	26.7		ug/L		101	45 - 122	2	56

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

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 462131

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460952

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]anthracene	ND		26.6	24.7		ug/L		93	55 - 133	8	57
Benzo[a]pyrene	ND		26.6	19.6		ug/L		74	50 - 108	14	59
Benzo[b]fluoranthene	ND		26.6	20.2		ug/L		76	50 - 128	8	62
Benzo[g,h,i]perylene	ND		26.6	18.4		ug/L		69	46 - 133	26	58
Benzo[k]fluoranthene	ND		26.6	22.4		ug/L		84	52 - 128	9	58
Chrysene	ND		26.6	25.0		ug/L		94	52 - 116	7	59
Dibenz(a,h)anthracene	ND		26.6	21.5		ug/L		81	52 - 143	19	60
Fluoranthene	ND		26.6	27.3		ug/L		103	32 - 150	2	59
Fluorene	ND		26.6	35.1		ug/L		132	15 - 150	2	49
Indeno[1,2,3-cd]pyrene	ND		26.6	19.6		ug/L		74	41 - 141	24	58
Phenanthrene	ND		26.6	29.3		ug/L		110	36 - 125	0	69
Pyrene	ND	F1	26.6	40.4	F1	ug/L		152	41 - 127	3	58
1-Methylnaphthalene	0.026	J	26.6	21.2		ug/L		79	10 - 150	4	66
2-Methylnaphthalene	0.026	J	26.6	20.6		ug/L		77	10 - 150	5	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*127*		*33 - 138*
2-Fluorobiphenyl	*106*		*15 - 122*
Nitrobenzene-d5	*93*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-460502/1-A
Matrix: Water
Analysis Batch: 460564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460502

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		10/08/19 08:59	10/08/19 13:14	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/08/19 08:59	10/08/19 13:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*10/08/19 08:59*	*10/08/19 13:14*	*1*

Lab Sample ID: LCS 400-460502/2-A
Matrix: Water
Analysis Batch: 460564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.100		ug/L		100	60 - 140
1,2-Dibromoethane	0.100	0.107		ug/L		107	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-177567-3 MS
Matrix: Water
Analysis Batch: 460564

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.0980	0.117		ug/L		120	65 - 135
1,2-Dibromoethane	ND		0.0980	0.112		ug/L		114	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*51 - 149*

Lab Sample ID: 400-177567-3 MSD
Matrix: Water
Analysis Batch: 460564

Client Sample ID: P54-ROX-100419
Prep Type: Total/NA
Prep Batch: 460502

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		0.0980	0.111		ug/L		113	65 - 135	6	20
1,2-Dibromoethane	ND		0.0980	0.115		ug/L		117	65 - 135	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☒ TESTAMERICA (TestAmerica Pensacola: 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (Lab Vendor # 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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO
DATE: 400-177567 COC
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 - 1.03.004 / 60592794 - 1.03.0044

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
ALT CONTACT #:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
TELEPHONE: 314-429-0100
FAX: 314-429-0462
E-MAIL to Contact: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com
SAMPLER NAME(S) Printed: James Ragsdale, Ben Burleson
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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL	FIELD NOTES:
	TB-ROX-100419-8260	10/4/19	0000	Water	2					2	X				TEMPERATURE ON RECEIPT C°
	TB-ROX-100419-8011	10/4/19	0000		2					2			X		
	PS4-ROX-100419	10/4/19	0920		4			2		6	2	1	2	1	Container PID Readings or Laboratory Notes
	PS4-ROX-100419-MS	10/4/19	0920		4			2		6	2	1	2	1	
	PS4-ROX-100419-MSD	10/4/19	0920		4			2		6	2	1	2	1	
	MW11-ROX-100419	10/4/19	1035		4			2		6	2	1	2	1	
	MW28-ROX-100419	10/4/19	1120		4			2		6	2	1	2	1	
	MW12-ROX-100419	10/4/19	1240		4			2		6	2	1	2	1	

10/4/19

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	Fedex: 7429 5927 5083 / 1155 5318 3355 Fedex: 7429 5927 5094 / 1155 5318 3491		
Relinquished by: (Signature)	Received by: (Signature) 1155 5318 3480		
Relinquished by: (Signature)	Received by: (Signature)	Date: 10.5.19	Time: 8:18

Version 14Dec15

Custody seals: 1106235 / 1106234
1106233 / 1106232
~~1106233 / 1106232~~
1106231 / 1106230
1106237 / 1106236
1106239 / 1106238
0.7°c, 1.8°c, 5.4°c, 1.3°c, IR8

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10/28/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177567-1

Login Number: 177567
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	0.7°C 1.8°C 5.4°C 1.3°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 400-177567-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177634-1-Rev.1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/21/2019

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

Sample Identification	Sample Identification
TB-ROX-100719-8011	TB-ROX-100719-8260
MW24-ROX-100719	MW16-ROX-100719
ROST4PZG-ROX-100719	

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. Several VOC and SVOC LCS/LCD recoveries, and/or SVOC LCS/LCSD RPDs were outside evaluation criteria. The PAH/SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in sample ROST4PZG-ROX-100719. The continuing calibration verifications for hexachlorocyclopentadiene and indene were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised to include missing SVOC QC data, which had previously been inadvertently omitted by the laboratory.

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 400-461393/1-A	PAHs	Fluoranthene	0.0426 µg/L
MB 400-461393/1-A	PAHs	Pyrene	0.0497 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
MW24-ROX-100719	PAHs	Fluoranthene	-	**U**
MW24-ROX-100719	PAHs	Pyrene	-	**U**
MW16-ROX-100719	PAHs	Pyrene	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-462208/1002	VOCs	1-Chlorohexane	**131**	NA	69-130
LCS 400-462208/1002	VOCs	n-Butylbenzene	**133**	NA	67-130
LCS 400-462208/1002	VOCs	sec-Butylbenzene	**131**	NA	66-130
LCS/LCSD 400-461393/4-A/5-A	SVOCs	Benzenethiol	**2/1**	**49**	10-120/30
LCS/LCSD 400-461393/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	14/20	**34**	10-129/30
LCS/LCSD 400-461393/2-A/3-A	SVOCs	Hexachloroethane	44/71	**48**	41-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-461393/4-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.

Sample ID	Parameter	Analyte	Qualification
MW24-ROX-100719	SVOCs	Benzenethiol	**UJ**
MW16-ROX-100719	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-100719	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZG-ROX-100719	PAHs	Terphenyl-d_{14}	**32**	33-138

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZG-ROX-100719	SVOCs	Terphenyl-d_{14}	**33**	53-125

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

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

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 hexachlorocyclopentadiene and indene were below acceptance criteria and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW24-ROX-100719	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW24-ROX-100719	SVOCs	Indene	**UJ**
MW16-ROX-100719	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW16-ROX-100719	SVOCs	Indene	**UJ**
ROST4PZG-ROX-100719	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZG-ROX-100719	SVOCs	Indene	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-177634-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

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

Attn: Elizabeth Kunkel

Authorized for release by:
10/28/2019 2:34:36 PM

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

Links

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Reviewed 11/21/19 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: 400-177634-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177634-1

Comments
Revised Report
Report revised to include missing SVOC QC data.
Supersedes report dated 10-24-19.

Receipt
The samples were received on 10/8/2019 2:29 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.8° C, 4.3° C and 5.6° C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) for analytical batch 400-462208 recovered outside control limits for the following analytes: 1-Chlorohexane, n-Butylbenzene and sec-Butylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-100719-8260 (400-177634-2), MW24-ROX-100719 (400-177634-3), MW16-ROX-100719 (400-177634-4) and ROST4PZG-ROX-100719 (400-177634-5). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D LL: The method blank for preparation batch 400-461393 and analytical batch 400-462759 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 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: ROST4PZG-ROX-100719 (400-177634-5). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461393 and analytical batch 400-462843 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene and Hexachloroethane.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462843 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Nitrophenol and Aniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462843 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 8270D: The continuing calibration verification (CCV) associated with batch 400-462843 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Indene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: ROST4PZG-ROX-100719 (400-177634-5). These results have been reported and qualified.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-461393 and analytical batch 400-462843 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has

Job ID: 400-177634-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461393 and analytical batch 400-462843 recovered outside control limits for the following analytes: Benzenethiol.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-461023 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

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

Job ID: 400-177634-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177634-1	TB-ROX-100719-8011	Water	10/07/19 00:00	10/08/19 14:29	
400-177634-2	TB-ROX-100719-8260	Water	10/07/19 00:00	10/08/19 14:29	
400-177634-3	MW24-ROX-100719	Water	10/07/19 09:15	10/08/19 14:29	
400-177634-4	MW16-ROX-100719	Water	10/07/19 10:05	10/08/19 14:29	
400-177634-5	ROST4PZG-ROX-100719	Water	10/07/19 11:30	10/08/19 14:29	

Detection Summary

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

Job ID: 400-177634-1

Client Sample ID: TB-ROX-100719-8011 — Lab Sample ID: 400-177634-1

No Detections.

Client Sample ID: TB-ROX-100719-8260 — Lab Sample ID: 400-177634-2

No Detections.

Client Sample ID: MW24-ROX-100719 — Lab Sample ID: 400-177634-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	~~0.032~~	J B U	0.19	0.019	ug/L	1		8270D LL	Total/NA
Pyrene	~~0.034~~	J B U	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.020	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.026	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW16-ROX-100719 — Lab Sample ID: 400-177634-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	~~0.020~~	J B U	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.023	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: ROST4PZG-ROX-100719 — Lab Sample ID: 400-177634-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.60	J	1.0	0.38	ug/L	1		8260B	Total/NA
Carbon disulfide	3.7		1.0	0.50	ug/L	1		8260B	Total/NA
Toluene	4.9		1.0	0.41	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-177634-1

Client Sample ID: TB-ROX-100719-8011
Date Collected: 10/07/19 00:00
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		10/10/19 14:05	10/10/19 20:26	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/10/19 14:05	10/10/19 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*10/10/19 14:05*	*10/10/19 20:26*	*1*

Client Sample ID: TB-ROX-100719-8260
Date Collected: 10/07/19 00:00
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-2
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			10/19/19 00:31	1
Acrolein	ND		20	10	ug/L			10/19/19 00:31	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 00:31	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 00:31	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 00:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 00:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 00:31	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 00:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 00:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 00:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 00:31	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 00:31	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			10/19/19 00:31	1
Chloromethane	ND		1.0	0.83	ug/L			10/19/19 00:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 00:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 00:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 00:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 00:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 00:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 00:31	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 00:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 00:31	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 00:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 00:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 00:31	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 00:31	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 00:31	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 00:31	1
n-Butylbenzene	ND	*	1.0	0.76	ug/L			10/19/19 00:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 00:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 00:31	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 00:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 00:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 00:31	1

Client Sample ID: TB-ROX-100719-8260
Date Collected: 10/07/19 00:00
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-2
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			10/19/19 00:31	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 00:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 00:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 00:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 00:31	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 00:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 00:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 00:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 00:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 00:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 00:31	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 00:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 00:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 00:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 00:31	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 00:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 00:31	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*10/19/19 00:31*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*10/19/19 00:31*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/19/19 00:31*	*1*

Client Sample ID: MW24-ROX-100719
Date Collected: 10/07/19 09:15
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-3
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			10/19/19 00:57	1
Acrolein	ND		20	10	ug/L			10/19/19 00:57	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 00:57	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 00:57	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 00:57	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 00:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 00:57	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 00:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 00:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 00:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 00:57	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 00:57	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			10/19/19 00:57	1
Chloromethane	ND		1.0	0.83	ug/L			10/19/19 00:57	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 00:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 00:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 00:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 00:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 00:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 00:57	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 00:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 00:57	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 00:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 00:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 00:57	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 00:57	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 00:57	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 00:57	1
n-Butylbenzene	ND	*	1.0	0.76	ug/L			10/19/19 00:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 00:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 00:57	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 00:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 00:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 00:57	1

Client Sample ID: MW24-ROX-100719
Date Collected: 10/07/19 09:15
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-3
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			10/19/19 00:57	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 00:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 00:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 00:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 00:57	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 00:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 00:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 00:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 00:57	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 00:57	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 00:57	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 00:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 00:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 00:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 00:57	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 00:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 00:57	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*10/19/19 00:57*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*10/19/19 00:57*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/19/19 00:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
Anthracene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Chrysene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Fluoranthene	~~0.032~~	J B U	0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
Fluorene	ND		0.19	0.020	ug/L		10/14/19 16:57	10/23/19 08:44	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 08:44	1
Phenanthrene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
Pyrene	~~0.034~~	J B U	0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
1-Methylnaphthalene	0.020	J	0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1
2-Methylnaphthalene	0.026	J	0.19	0.019	ug/L		10/14/19 16:57	10/23/19 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*33 - 138*	*10/14/19 16:57*	*10/23/19 08:44*	*1*
2-Fluorobiphenyl	*84*		*15 - 122*	*10/14/19 16:57*	*10/23/19 08:44*	*1*

Client Sample ID: MW24-ROX-100719
Date Collected: 10/07/19 09:15
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	81		19 - 130	10/14/19 16:57	10/23/19 08:44	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		10/14/19 16:57	10/23/19 20:18	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/14/19 16:57	10/23/19 20:18	1
Benzoic acid	ND		28	6.9	ug/L		10/14/19 16:57	10/23/19 20:18	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/14/19 16:57	10/23/19 20:18	1
Bis(2-chloroethoxy)methane	ND		9.5	0.65	ug/L		10/14/19 16:57	10/23/19 20:18	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/14/19 16:57	10/23/19 20:18	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/14/19 16:57	10/23/19 20:18	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		10/14/19 16:57	10/23/19 20:18	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/14/19 16:57	10/23/19 20:18	1
Butyl benzyl phthalate	ND		9.5	0.65	ug/L		10/14/19 16:57	10/23/19 20:18	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/14/19 16:57	10/23/19 20:18	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/14/19 16:57	10/23/19 20:18	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/14/19 16:57	10/23/19 20:18	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/14/19 16:57	10/23/19 20:18	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/14/19 16:57	10/23/19 20:18	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		10/14/19 16:57	10/23/19 20:18	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/14/19 16:57	10/23/19 20:18	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		10/14/19 16:57	10/23/19 20:18	1
Diethyl phthalate	ND		9.5	0.66	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/14/19 16:57	10/23/19 20:18	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/14/19 16:57	10/23/19 20:18	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/14/19 16:57	10/23/19 20:18	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/14/19 16:57	10/23/19 20:18	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/14/19 16:57	10/23/19 20:18	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/14/19 16:57	10/23/19 20:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/14/19 16:57	10/23/19 20:18	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/14/19 16:57	10/23/19 20:18	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/14/19 16:57	10/23/19 20:18	1
Hexachloroethane	ND	*	9.5	4.0	ug/L		10/14/19 16:57	10/23/19 20:18	1
Indene	ND	UJ	9.5	0.95	ug/L		10/14/19 16:57	10/23/19 20:18	1
Isophorone	ND		9.5	0.54	ug/L		10/14/19 16:57	10/23/19 20:18	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/14/19 16:57	10/23/19 20:18	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/14/19 16:57	10/23/19 20:18	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/14/19 16:57	10/23/19 20:18	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/14/19 16:57	10/23/19 20:18	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/14/19 16:57	10/23/19 20:18	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/14/19 16:57	10/23/19 20:18	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/14/19 16:57	10/23/19 20:18	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/14/19 16:57	10/23/19 20:18	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/14/19 16:57	10/23/19 20:18	1

Client Sample ID: MW24-ROX-100719
Date Collected: 10/07/19 09:15
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/14/19 16:57	10/23/19 20:18	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/14/19 16:57	10/23/19 20:18	1
Pentachlorophenol	ND		19	1.7	ug/L		10/14/19 16:57	10/23/19 20:18	1
Phenol	ND		9.5	2.5	ug/L		10/14/19 16:57	10/23/19 20:18	1
Pyridine	ND		9.5	3.0	ug/L		10/14/19 16:57	10/23/19 20:18	1
Quinoline	ND		9.5	5.7	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/14/19 16:57	10/23/19 20:18	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/14/19 16:57	10/23/19 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*34 - 120*	*10/14/19 16:57*	*10/23/19 20:18*	*1*
2-Fluorophenol	*54*		*10 - 120*	*10/14/19 16:57*	*10/23/19 20:18*	*1*
Nitrobenzene-d5	*75*		*27 - 120*	*10/14/19 16:57*	*10/23/19 20:18*	*1*
Phenol-d5	*58*		*10 - 120*	*10/14/19 16:57*	*10/23/19 20:18*	*1*
Terphenyl-d14	*92*		*53 - 125*	*10/14/19 16:57*	*10/23/19 20:18*	*1*
2,4,6-Tribromophenol	*66*		*15 - 135*	*10/14/19 16:57*	*10/23/19 20:18*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0052	ug/L		10/10/19 14:05	10/10/19 21:13	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/10/19 14:05	10/10/19 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*10/10/19 14:05*	*10/10/19 21:13*	*1*

Client Sample ID: MW16-ROX-100719
Date Collected: 10/07/19 10:05
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-4
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			10/19/19 01:24	1
Acrolein	ND		20	10	ug/L			10/19/19 01:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 01:24	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 01:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 01:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 01:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 01:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 01:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 01:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 01:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 01:24	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 01:24	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			10/19/19 01:24	1
Chloromethane	ND		1.0	0.83	ug/L			10/19/19 01:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 01:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 01:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 01:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 01:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 01:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 01:24	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 01:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 01:24	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 01:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 01:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 01:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 01:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 01:24	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 01:24	1
n-Butylbenzene	ND	*	1.0	0.76	ug/L			10/19/19 01:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 01:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 01:24	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 01:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 01:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 01:24	1

Client Sample ID: MW16-ROX-100719
Date Collected: 10/07/19 10:05
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-4
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			10/19/19 01:24	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 01:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 01:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 01:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 01:24	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 01:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 01:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 01:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 01:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 01:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 01:24	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 01:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 01:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 01:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 01:24	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 01:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 01:24	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*10/19/19 01:24*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*10/19/19 01:24*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/19/19 01:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
Anthracene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Chrysene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Fluoranthene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
Fluorene	ND		0.19	0.020	ug/L		10/14/19 16:57	10/23/19 09:01	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		10/14/19 16:57	10/23/19 09:01	1
Phenanthrene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
Pyrene	~~0.020~~	J B U	0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1
2-Methylnaphthalene	**0.023**	**J**	0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*33 - 138*	*10/14/19 16:57*	*10/23/19 09:01*	*1*
2-Fluorobiphenyl	*64*		*15 - 122*	*10/14/19 16:57*	*10/23/19 09:01*	*1*

Client Sample ID: MW16-ROX-100719
Date Collected: 10/07/19 10:05
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	63		19 - 130	10/14/19 16:57	10/23/19 09:01	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		10/14/19 16:57	10/23/19 19:53	1
Benzenethiol	ND	* UJ	9.7	1.6	ug/L		10/14/19 16:57	10/23/19 19:53	1
Benzoic acid	ND		29	7.1	ug/L		10/14/19 16:57	10/23/19 19:53	1
Benzyl alcohol	ND		9.7	1.9	ug/L		10/14/19 16:57	10/23/19 19:53	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		10/14/19 16:57	10/23/19 19:53	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		10/14/19 16:57	10/23/19 19:53	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		10/14/19 16:57	10/23/19 19:53	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		10/14/19 16:57	10/23/19 19:53	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		10/14/19 16:57	10/23/19 19:53	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		10/14/19 16:57	10/23/19 19:53	1
4-Chloroaniline	ND		9.7	3.3	ug/L		10/14/19 16:57	10/23/19 19:53	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		10/14/19 16:57	10/23/19 19:53	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		10/14/19 16:57	10/23/19 19:53	1
2-Chlorophenol	ND		9.7	2.1	ug/L		10/14/19 16:57	10/23/19 19:53	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		10/14/19 16:57	10/23/19 19:53	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		10/14/19 16:57	10/23/19 19:53	1
Dibenzofuran	ND		9.7	0.50	ug/L		10/14/19 16:57	10/23/19 19:53	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		10/14/19 16:57	10/23/19 19:53	1
Diethyl phthalate	ND		9.7	0.68	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		10/14/19 16:57	10/23/19 19:53	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		10/14/19 16:57	10/23/19 19:53	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		10/14/19 16:57	10/23/19 19:53	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		10/14/19 16:57	10/23/19 19:53	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		10/14/19 16:57	10/23/19 19:53	1
1,4-Dioxane	ND		9.7	0.97	ug/L		10/14/19 16:57	10/23/19 19:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		10/14/19 16:57	10/23/19 19:53	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		10/14/19 16:57	10/23/19 19:53	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/14/19 16:57	10/23/19 19:53	1
Hexachloroethane	ND	*	9.7	4.1	ug/L		10/14/19 16:57	10/23/19 19:53	1
Indene	ND	UJ	9.7	0.97	ug/L		10/14/19 16:57	10/23/19 19:53	1
Isophorone	ND		9.7	0.55	ug/L		10/14/19 16:57	10/23/19 19:53	1
2-Methylphenol	ND		9.7	1.7	ug/L		10/14/19 16:57	10/23/19 19:53	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/14/19 16:57	10/23/19 19:53	1
2-Nitroaniline	ND		9.7	2.1	ug/L		10/14/19 16:57	10/23/19 19:53	1
3-Nitroaniline	ND		9.7	1.7	ug/L		10/14/19 16:57	10/23/19 19:53	1
4-Nitroaniline	ND		9.7	2.4	ug/L		10/14/19 16:57	10/23/19 19:53	1
Nitrobenzene	ND		9.7	0.53	ug/L		10/14/19 16:57	10/23/19 19:53	1
2-Nitrophenol	ND		9.7	0.63	ug/L		10/14/19 16:57	10/23/19 19:53	1
4-Nitrophenol	ND		9.7	2.0	ug/L		10/14/19 16:57	10/23/19 19:53	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		10/14/19 16:57	10/23/19 19:53	1

Client Sample ID: MW16-ROX-100719
Date Collected: 10/07/19 10:05
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		10/14/19 16:57	10/23/19 19:53	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		10/14/19 16:57	10/23/19 19:53	1
Pentachlorophenol	ND		19	1.8	ug/L		10/14/19 16:57	10/23/19 19:53	1
Phenol	ND		9.7	2.5	ug/L		10/14/19 16:57	10/23/19 19:53	1
Pyridine	ND		9.7	3.1	ug/L		10/14/19 16:57	10/23/19 19:53	1
Quinoline	ND		9.7	5.8	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		10/14/19 16:57	10/23/19 19:53	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/14/19 16:57	10/23/19 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*34 - 120*	*10/14/19 16:57*	*10/23/19 19:53*	*1*
2-Fluorophenol	*43*		*10 - 120*	*10/14/19 16:57*	*10/23/19 19:53*	*1*
Nitrobenzene-d5	*58*		*27 - 120*	*10/14/19 16:57*	*10/23/19 19:53*	*1*
Phenol-d5	*55*		*10 - 120*	*10/14/19 16:57*	*10/23/19 19:53*	*1*
Terphenyl-d14	*68*		*53 - 125*	*10/14/19 16:57*	*10/23/19 19:53*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*10/14/19 16:57*	*10/23/19 19:53*	*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		0.030	0.0054	ug/L		10/10/19 14:05	10/10/19 21:36	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/10/19 14:05	10/10/19 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*10/10/19 14:05*	*10/10/19 21:36*	*1*

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

Job ID: 400-177634-1

Client Sample ID: ROST4PZG-ROX-100719
Date Collected: 10/07/19 11:30
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-5
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			10/19/19 01:51	1
Acrolein	ND		20	10	ug/L			10/19/19 01:51	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 01:51	1
Benzene	**0.60**	**J**	1.0	0.38	ug/L			10/19/19 01:51	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 01:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 01:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 01:51	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 01:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 01:51	1
Carbon disulfide	**3.7**		1.0	0.50	ug/L			10/19/19 01:51	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 01:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 01:51	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 01:51	1
1-Chlorohexane	ND	*	1.0	0.70	ug/L			10/19/19 01:51	1
Chloromethane	ND		1.0	0.83	ug/L			10/19/19 01:51	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 01:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 01:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 01:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 01:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 01:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 01:51	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 01:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 01:51	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 01:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 01:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 01:51	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 01:51	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 01:51	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 01:51	1
n-Butylbenzene	ND	*	1.0	0.76	ug/L			10/19/19 01:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 01:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 01:51	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 01:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 01:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 01:51	1

Client Sample ID: ROST4PZG-ROX-100719
Date Collected: 10/07/19 11:30
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-5
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			10/19/19 01:51	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 01:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 01:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 01:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 01:51	1
Toluene	**4.9**		1.0	0.41	ug/L			10/19/19 01:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 01:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 01:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 01:51	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 01:51	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 01:51	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 01:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 01:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 01:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 01:51	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 01:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 01:51	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*10/19/19 01:51*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*10/19/19 01:51*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/19/19 01:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
Anthracene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Chrysene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Fluoranthene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
Fluorene	ND		0.19	0.020	ug/L		10/14/19 16:57	10/23/19 09:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/14/19 16:57	10/23/19 09:19	1
Phenanthrene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
Pyrene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/14/19 16:57	10/23/19 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*32*	*X*	*33 - 138*	*10/14/19 16:57*	*10/23/19 09:19*	*1*
2-Fluorobiphenyl	*58*		*15 - 122*	*10/14/19 16:57*	*10/23/19 09:19*	*1*

Client Sample ID: ROST4PZG-ROX-100719
Date Collected: 10/07/19 11:30
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	59		19 - 130	10/14/19 16:57	10/23/19 09:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		10/14/19 16:57	10/23/19 19:28	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/14/19 16:57	10/23/19 19:28	1
Benzoic acid	ND		29	7.0	ug/L		10/14/19 16:57	10/23/19 19:28	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/14/19 16:57	10/23/19 19:28	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/14/19 16:57	10/23/19 19:28	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/14/19 16:57	10/23/19 19:28	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/14/19 16:57	10/23/19 19:28	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/14/19 16:57	10/23/19 19:28	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/14/19 16:57	10/23/19 19:28	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/14/19 16:57	10/23/19 19:28	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/14/19 16:57	10/23/19 19:28	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/14/19 16:57	10/23/19 19:28	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/14/19 16:57	10/23/19 19:28	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/14/19 16:57	10/23/19 19:28	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/14/19 16:57	10/23/19 19:28	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/14/19 16:57	10/23/19 19:28	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/14/19 16:57	10/23/19 19:28	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/14/19 16:57	10/23/19 19:28	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/14/19 16:57	10/23/19 19:28	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/14/19 16:57	10/23/19 19:28	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/14/19 16:57	10/23/19 19:28	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/14/19 16:57	10/23/19 19:28	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/14/19 16:57	10/23/19 19:28	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/14/19 16:57	10/23/19 19:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/14/19 16:57	10/23/19 19:28	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/14/19 16:57	10/23/19 19:28	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/14/19 16:57	10/23/19 19:28	1
Hexachloroethane	ND	*	9.5	4.0	ug/L		10/14/19 16:57	10/23/19 19:28	1
Indene	ND	UJ	9.5	0.95	ug/L		10/14/19 16:57	10/23/19 19:28	1
Isophorone	ND		9.5	0.54	ug/L		10/14/19 16:57	10/23/19 19:28	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/14/19 16:57	10/23/19 19:28	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/14/19 16:57	10/23/19 19:28	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/14/19 16:57	10/23/19 19:28	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/14/19 16:57	10/23/19 19:28	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/14/19 16:57	10/23/19 19:28	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/14/19 16:57	10/23/19 19:28	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/14/19 16:57	10/23/19 19:28	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/14/19 16:57	10/23/19 19:28	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/14/19 16:57	10/23/19 19:28	1

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

Job ID: 400-177634-1

Client Sample ID: ROST4PZG-ROX-100719
Date Collected: 10/07/19 11:30
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/14/19 16:57	10/23/19 19:28	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/14/19 16:57	10/23/19 19:28	1
Pentachlorophenol	ND		19	1.7	ug/L		10/14/19 16:57	10/23/19 19:28	1
Phenol	ND		9.5	2.5	ug/L		10/14/19 16:57	10/23/19 19:28	1
Pyridine	ND		9.5	3.0	ug/L		10/14/19 16:57	10/23/19 19:28	1
Quinoline	ND		9.5	5.7	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/14/19 16:57	10/23/19 19:28	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/14/19 16:57	10/23/19 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*10/14/19 16:57*	*10/23/19 19:28*	*1*
2-Fluorophenol	*34*		*10 - 120*	*10/14/19 16:57*	*10/23/19 19:28*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*10/14/19 16:57*	*10/23/19 19:28*	*1*
Phenol-d5	*55*		*10 - 120*	*10/14/19 16:57*	*10/23/19 19:28*	*1*
Terphenyl-d14	*33*	*X*	*53 - 125*	*10/14/19 16:57*	*10/23/19 19:28*	*1*
2,4,6-Tribromophenol	*68*		*15 - 135*	*10/14/19 16:57*	*10/23/19 19:28*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/10/19 14:05	10/10/19 22:00	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/10/19 14:05	10/10/19 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*10/10/19 14:05*	*10/10/19 22:00*	*1*

Definitions/Glossary

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

Job ID: 400-177634-1

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
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: 400-177634-1

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)
400-177634-2	TB-ROX-100719-8260	101	100	101
400-177634-3	MW24-ROX-100719	98	100	104
400-177634-4	MW16-ROX-100719	98	101	101
400-177634-5	ROST4PZG-ROX-100719	103	95	106
LCS 400-462208/1002	Lab Control Sample	103	95	103
MB 400-462208/5	Method Blank	99	95	103

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (34-120)	2FP (10-120)	NBZ (27-120)	PHL (10-120)	TPHL (53-125)	TBP (15-135)
400-177634-3	MW24-ROX-100719	79	54	75	58	92	66
400-177634-4	MW16-ROX-100719	62	43	58	55	68	60
400-177634-5	ROST4PZG-ROX-100719	58	34	62	55	33 X	68
LCS 400-461393/2-A	Lab Control Sample	76	41	83	70	85	80
LCS 400-461393/4-A	Lab Control Sample	76	37	80	55	94	29
LCSD 400-461393/3-A	Lab Control Sample Dup	83	63	96	84	88	87
LCSD 400-461393/5-A	Lab Control Sample Dup	69	16	71	39	92	23
MB 400-461393/1-A	Method Blank	75	42	79	68	91	76

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)
400-177634-3	MW24-ROX-100719	82	84	81
400-177634-4	MW16-ROX-100719	60	64	63
400-177634-5	ROST4PZG-ROX-100719	32 X	58	59
LCS 400-461393/2-A	Lab Control Sample	79	78	76
LCSD 400-461393/3-A	Lab Control Sample Dup	78	82	82
MB 400-461393/1-A	Method Blank	81	74	79

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-177634-1

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)
400-177634-1	TB-ROX-100719-8011	91
400-177634-3	MW24-ROX-100719	94
400-177634-4	MW16-ROX-100719	82
400-177634-5	ROST4PZG-ROX-100719	92
LCS 400-460985/2-A	Lab Control Sample	97
LCSD 400-460985/3-A	Lab Control Sample Dup	94
MB 400-460985/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177634-1

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: 400-177634-1

Client Sample ID: TB-ROX-100719-8011

Date Collected: 10/07/19 00:00
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.5 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 20:26	KLR	TAL PEN

Client Sample ID: TB-ROX-100719-8260

Date Collected: 10/07/19 00:00
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-2
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	462208	10/19/19 00:31	WPD	TAL PEN

Client Sample ID: MW24-ROX-100719

Date Collected: 10/07/19 09:15
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-3
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	462208	10/19/19 00:57	WPD	TAL PEN
Total/NA	Prep	3520C			1054 mL	1 mL	461393	10/14/19 16:57	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 20:18	VC1	TAL PEN
Total/NA	Prep	3520C			1054 mL	1 mL	461393	10/14/19 16:57	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 08:44	KJA	TAL PEN
Total/NA	Prep	8011			36.8 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 21:13	KLR	TAL PEN

Client Sample ID: MW16-ROX-100719

Date Collected: 10/07/19 10:05
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-4
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	462208	10/19/19 01:24	WPD	TAL PEN
Total/NA	Prep	3520C			1031.4 mL	1 mL	461393	10/14/19 16:57	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 19:53	VC1	TAL PEN
Total/NA	Prep	3520C			1031.4 mL	1 mL	461393	10/14/19 16:57	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 09:01	KJA	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 21:36	KLR	TAL PEN

Client Sample ID: ROST4PZG-ROX-100719

Date Collected: 10/07/19 11:30
Date Received: 10/08/19 14:29

Lab Sample ID: 400-177634-5
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	462208	10/19/19 01:51	WPD	TAL PEN
Total/NA	Prep	3520C			1049.8 mL	1 mL	461393	10/14/19 16:57	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 19:28	VC1	TAL PEN

Client Sample ID: ROST4PZG-ROX-100719

Lab Sample ID: 400-177634-5

Date Collected: 10/07/19 11:30

Matrix: Water

Date Received: 10/08/19 14:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1049.8 mL	1 mL	461393	10/14/19 16:57	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 09:19	KJA	TAL PEN
Total/NA	Prep	8011			36.4 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 22:00	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-460985/1-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	460985	10/10/19 14:04	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 16:54	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-461393/1-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 17:22	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 07:52	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462208/5

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	462208	10/18/19 21:52	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-460985/2-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	460985	10/10/19 14:04	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 17:18	KLR	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-461393/2-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 17:47	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177634-1

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

Lab Sample ID: LCS 400-461393/2-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 08:09	KJA	TAL PEN

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

Lab Sample ID: LCS 400-461393/4-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462843	10/23/19 20:44	VC1	TAL PEN

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

Lab Sample ID: LCS 400-462208/1002
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	462208	10/18/19 20:46	WPD	TAL PEN

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

Lab Sample ID: LCSD 400-460985/3-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	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 17:41	KLR	TAL PEN

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

Lab Sample ID: LCSD 400-461393/3-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 18:12	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 08:27	KJA	TAL PEN

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

Lab Sample ID: LCSD 400-461393/5-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462843	10/23/19 21:09	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: 400-177634-1

GC/MS VOA

Analysis Batch: 462208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177634-2	TB-ROX-100719-8260	Total/NA	Water	8260B	
400-177634-3	MW24-ROX-100719	Total/NA	Water	8260B	
400-177634-4	MW16-ROX-100719	Total/NA	Water	8260B	
400-177634-5	ROST4PZG-ROX-100719	Total/NA	Water	8260B	
MB 400-462208/5	Method Blank	Total/NA	Water	8260B	
LCS 400-462208/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 461393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177634-3	MW24-ROX-100719	Total/NA	Water	3520C	
400-177634-4	MW16-ROX-100719	Total/NA	Water	3520C	
400-177634-5	ROST4PZG-ROX-100719	Total/NA	Water	3520C	
MB 400-461393/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-461393/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-461393/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-461393/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-461393/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177634-3	MW24-ROX-100719	Total/NA	Water	8270D LL	461393
400-177634-4	MW16-ROX-100719	Total/NA	Water	8270D LL	461393
400-177634-5	ROST4PZG-ROX-100719	Total/NA	Water	8270D LL	461393
MB 400-461393/1-A	Method Blank	Total/NA	Water	8270D LL	461393
LCS 400-461393/2-A	Lab Control Sample	Total/NA	Water	8270D LL	461393
LCSD 400-461393/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	461393

Analysis Batch: 462843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177634-3	MW24-ROX-100719	Total/NA	Water	8270D	461393
400-177634-4	MW16-ROX-100719	Total/NA	Water	8270D	461393
400-177634-5	ROST4PZG-ROX-100719	Total/NA	Water	8270D	461393
MB 400-461393/1-A	Method Blank	Total/NA	Water	8270D	461393
LCS 400-461393/2-A	Lab Control Sample	Total/NA	Water	8270D	461393
LCS 400-461393/4-A	Lab Control Sample	Total/NA	Water	8270D	461393
LCSD 400-461393/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	461393
LCSD 400-461393/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	461393

GC Semi VOA

Prep Batch: 460985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177634-1	TB-ROX-100719-8011	Total/NA	Water	8011	
400-177634-3	MW24-ROX-100719	Total/NA	Water	8011	
400-177634-4	MW16-ROX-100719	Total/NA	Water	8011	
400-177634-5	ROST4PZG-ROX-100719	Total/NA	Water	8011	
MB 400-460985/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-460985/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-460985/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-177634-1

GC Semi VOA

Analysis Batch: 461023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177634-1	TB-ROX-100719-8011	Total/NA	Water	8011	460985
400-177634-3	MW24-ROX-100719	Total/NA	Water	8011	460985
400-177634-4	MW16-ROX-100719	Total/NA	Water	8011	460985
400-177634-5	ROST4PZG-ROX-100719	Total/NA	Water	8011	460985
MB 400-460985/1-A	Method Blank	Total/NA	Water	8011	460985
LCS 400-460985/2-A	Lab Control Sample	Total/NA	Water	8011	460985
LCSD 400-460985/3-A	Lab Control Sample Dup	Total/NA	Water	8011	460985

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

Lab Sample ID: MB 400-462208/5
Matrix: Water
Analysis Batch: 462208

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/18/19 21:52	1
Acrolein	ND		20	10	ug/L			10/18/19 21:52	1
Acrylonitrile	ND		10	2.8	ug/L			10/18/19 21:52	1
Benzene	ND		1.0	0.38	ug/L			10/18/19 21:52	1
Bromobenzene	ND		1.0	0.54	ug/L			10/18/19 21:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/18/19 21:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Bromoform	ND		5.0	0.71	ug/L			10/18/19 21:52	1
Bromomethane	ND		1.0	0.98	ug/L			10/18/19 21:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/18/19 21:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Chloroethane	ND		1.0	0.76	ug/L			10/18/19 21:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/18/19 21:52	1
Chloroform	ND		1.0	0.60	ug/L			10/18/19 21:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/18/19 21:52	1
Chloromethane	ND		1.0	0.83	ug/L			10/18/19 21:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/18/19 21:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/18/19 21:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/18/19 21:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/18/19 21:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/18/19 21:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/18/19 21:52	1
2-Hexanone	ND		25	3.1	ug/L			10/18/19 21:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/18/19 21:52	1
Methylene bromide	ND		5.0	0.59	ug/L			10/18/19 21:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/18/19 21:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/18/19 21:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/18/19 21:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/18/19 21:52	1
Naphthalene	ND		1.0	1.0	ug/L			10/18/19 21:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/18/19 21:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/18/19 21:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/18/19 21:52	1
o-Xylene	ND		5.0	0.60	ug/L			10/18/19 21:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/18/19 21:52	1

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

Lab Sample ID: MB 400-462208/5
Matrix: Water
Analysis Batch: 462208

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/18/19 21:52	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/18/19 21:52	1
Styrene	ND		1.0	1.0	ug/L			10/18/19 21:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/18/19 21:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/18/19 21:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/18/19 21:52	1
Toluene	ND		1.0	0.41	ug/L			10/18/19 21:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/18/19 21:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/18/19 21:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/18/19 21:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/18/19 21:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/18/19 21:52	1
Trichloroethene	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/18/19 21:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/18/19 21:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/18/19 21:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/18/19 21:52	1
Vinyl acetate	ND		25	2.0	ug/L			10/18/19 21:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/18/19 21:52	1
Xylenes, Total	ND		10	1.6	ug/L			10/18/19 21:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*10/18/19 21:52*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*10/18/19 21:52*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/18/19 21:52*	*1*

Lab Sample ID: LCS 400-462208/1002
Matrix: Water
Analysis Batch: 462208

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	183		ug/L		91	43 - 160
Acrolein	500	393		ug/L		79	38 - 160
Acrylonitrile	500	478		ug/L		96	64 - 142
Benzene	50.0	55.8		ug/L		112	70 - 130
Bromobenzene	50.0	53.7		ug/L		107	70 - 132
Bromochloromethane	50.0	49.6		ug/L		99	70 - 130
Bromodichloromethane	50.0	49.6		ug/L		99	67 - 133
Bromoform	50.0	44.5		ug/L		89	57 - 140
Bromomethane	50.0	52.5		ug/L		105	10 - 160
2-Butanone (MEK)	200	187		ug/L		94	61 - 145
Carbon disulfide	50.0	55.5		ug/L		111	61 - 137
Carbon tetrachloride	50.0	47.3		ug/L		95	61 - 137
Chlorobenzene	50.0	56.3		ug/L		113	70 - 130
Dibromochloromethane	50.0	48.7		ug/L		97	67 - 135
Chloroethane	50.0	54.9		ug/L		110	55 - 141

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

Lab Sample ID: LCS 400-462208/1002
Matrix: Water
Analysis Batch: 462208

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	15.3		ug/L		31	10 - 160
Chloroform	50.0	55.2		ug/L		110	69 - 130
1-Chlorohexane	50.0	65.4	*	ug/L		131	69 - 130
Chloromethane	50.0	63.7		ug/L		127	58 - 137
cis-1,2-Dichloroethene	50.0	53.4		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	47.9		ug/L		96	69 - 132
1,2-Dichlorobenzene	50.0	55.7		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	56.6		ug/L		113	70 - 130
1,4-Dichlorobenzene	50.0	55.6		ug/L		111	70 - 130
Dichlorodifluoromethane	50.0	50.6		ug/L		101	41 - 146
1,1-Dichloroethane	50.0	55.1		ug/L		110	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	51.8		ug/L		104	63 - 134
1,2-Dichloropropane	50.0	52.8		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	53.4		ug/L		107	70 - 130
2,2-Dichloropropane	50.0	39.1		ug/L		78	52 - 135
1,1-Dichloropropene	50.0	60.1		ug/L		120	70 - 130
Ethylbenzene	50.0	58.0		ug/L		116	70 - 130
Ethyl methacrylate	50.0	45.3		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	57.3		ug/L		115	53 - 140
2-Hexanone	200	209		ug/L		105	65 - 137
Isopropylbenzene	50.0	60.4		ug/L		121	70 - 130
Methylene bromide	50.0	49.3		ug/L		99	70 - 130
Methylene Chloride	50.0	50.9		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	199		ug/L		99	69 - 138
Methyl tert-butyl ether	50.0	43.4		ug/L		87	66 - 130
m-Xylene & p-Xylene	50.0	58.6		ug/L		117	70 - 130
Naphthalene	50.0	45.6		ug/L		91	47 - 149
n-Butylbenzene	50.0	66.5	*	ug/L		133	67 - 130
N-Propylbenzene	50.0	63.0		ug/L		126	70 - 130
o-Chlorotoluene	50.0	62.1		ug/L		124	70 - 130
o-Xylene	50.0	57.6		ug/L		115	70 - 130
p-Chlorotoluene	50.0	59.6		ug/L		119	70 - 130
p-Isopropyltoluene	50.0	63.0		ug/L		126	65 - 130
sec-Butylbenzene	50.0	65.3	*	ug/L		131	66 - 130
Styrene	50.0	56.0		ug/L		112	70 - 130
tert-Butylbenzene	50.0	65.0		ug/L		130	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.0		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	53.0		ug/L		106	70 - 131
Tetrachloroethene	50.0	57.6		ug/L		115	65 - 130
Toluene	50.0	58.4		ug/L		117	70 - 130
trans-1,2-Dichloroethene	50.0	56.2		ug/L		112	70 - 130
trans-1,3-Dichloropropene	50.0	44.1		ug/L		88	63 - 130
1,2,3-Trichlorobenzene	50.0	52.2		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	68 - 130
1,1,2-Trichloroethane	50.0	51.6		ug/L		103	70 - 130
Trichloroethene	50.0	58.0		ug/L		116	70 - 130
Trichlorofluoromethane	50.0	58.0		ug/L		116	65 - 138

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

Lab Sample ID: LCS 400-462208/1002
Matrix: Water
Analysis Batch: 462208

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.4		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	50.0	61.7		ug/L		123	70 - 130
1,3,5-Trimethylbenzene	50.0	62.3		ug/L		125	69 - 130
Vinyl acetate	100	88.6		ug/L		89	26 - 160
Vinyl chloride	50.0	56.4		ug/L		113	59 - 136
Xylenes, Total	100	116		ug/L		116	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*103*		*80 - 120*

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
Benzenethiol	ND		10	1.7	ug/L		10/14/19 08:18	10/23/19 17:22	1
Benzoic acid	ND		30	7.3	ug/L		10/14/19 08:18	10/23/19 17:22	1
Benzyl alcohol	ND		10	2.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/14/19 08:18	10/23/19 17:22	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/14/19 08:18	10/23/19 17:22	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/14/19 08:18	10/23/19 17:22	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/14/19 08:18	10/23/19 17:22	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Chloroaniline	ND		10	3.4	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Chlorophenol	ND		10	2.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Dibenzofuran	ND		10	0.52	ug/L		10/14/19 08:18	10/23/19 17:22	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Diethyl phthalate	ND		10	0.70	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/14/19 08:18	10/23/19 17:22	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/14/19 08:18	10/23/19 17:22	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/14/19 08:18	10/23/19 17:22	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/14/19 08:18	10/23/19 17:22	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/14/19 08:18	10/23/19 17:22	1
1,4-Dioxane	ND		10	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/14/19 08:18	10/23/19 17:22	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/14/19 08:18	10/23/19 17:22	1
Hexachloroethane	ND		10	4.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
Indene	ND		10	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Isophorone	ND		10	0.57	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Methylphenol	ND		10	1.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Nitroaniline	ND		10	2.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
3-Nitroaniline	ND		10	1.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Nitroaniline	ND		10	2.5	ug/L		10/14/19 08:18	10/23/19 17:22	1
Nitrobenzene	ND		10	0.55	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Nitrophenol	ND		10	0.65	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Nitrophenol	ND		10	2.1	ug/L		10/14/19 08:18	10/23/19 17:22	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/14/19 08:18	10/23/19 17:22	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/14/19 08:18	10/23/19 17:22	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/14/19 08:18	10/23/19 17:22	1
Pentachlorophenol	ND		20	1.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
Phenol	ND		10	2.6	ug/L		10/14/19 08:18	10/23/19 17:22	1
Pyridine	ND		10	3.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
Quinoline	ND		10	6.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/14/19 08:18	10/23/19 17:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*10/14/19 08:18*	*10/23/19 17:22*	*1*
2-Fluorophenol	*42*		*10 - 120*	*10/14/19 08:18*	*10/23/19 17:22*	*1*
Nitrobenzene-d5	*79*		*27 - 120*	*10/14/19 08:18*	*10/23/19 17:22*	*1*
Phenol-d5	*68*		*10 - 120*	*10/14/19 08:18*	*10/23/19 17:22*	*1*
Terphenyl-d14	*91*		*53 - 125*	*10/14/19 08:18*	*10/23/19 17:22*	*1*
2,4,6-Tribromophenol	*76*		*15 - 135*	*10/14/19 08:18*	*10/23/19 17:22*	*1*

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	23.4		ug/L		78	29 - 120
Benzoic acid	117	78.5		ug/L		67	10 - 150
Benzyl alcohol	30.0	22.7		ug/L		76	19 - 125
Bis(2-chloroethoxy)methane	30.0	22.9		ug/L		76	45 - 120
Bis(2-chloroethyl)ether	30.0	23.1		ug/L		77	48 - 120
bis (2-chloroisopropyl) ether	30.0	27.9		ug/L		93	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.3		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	22.2		ug/L		74	55 - 122
Butyl benzyl phthalate	30.0	25.3		ug/L		84	46 - 145
4-Chloroaniline	30.0	20.3		ug/L		68	30 - 120
4-Chloro-3-methylphenol	30.0	24.9		ug/L		83	39 - 140

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

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	21.8		ug/L		73	52 - 120
2-Chlorophenol	30.0	18.8		ug/L		63	34 - 120
4-Chlorophenyl phenyl ether	30.0	22.9		ug/L		76	58 - 124
Dibenz[a,h]acridine	30.0	22.5		ug/L		75	46 - 149
Dibenzofuran	30.0	24.1		ug/L		80	58 - 123
3,3'-Dichlorobenzidine	40.0	37.2		ug/L		93	39 - 135
2,4-Dichlorophenol	30.0	21.5		ug/L		72	39 - 128
Diethyl phthalate	30.0	26.7		ug/L		89	44 - 146
2,4-Dimethylphenol	30.0	25.2		ug/L		84	44 - 120
Dimethyl phthalate	30.0	23.4		ug/L		78	50 - 131
Di-n-butyl phthalate	30.0	27.0		ug/L		90	55 - 131
4,6-Dinitro-ortho-cresol	60.0	51.5		ug/L		86	10 - 150
2,4-Dinitrophenol	60.0	58.2		ug/L		97	10 - 150
2,4-Dinitrotoluene	30.0	26.2		ug/L		87	58 - 140
2,6-Dinitrotoluene	30.0	24.0		ug/L		80	57 - 130
Di-n-octyl phthalate	30.0	26.3		ug/L		88	50 - 150
1,4-Dioxane	30.0	17.5		ug/L		58	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	27.3		ug/L		91	47 - 123
Hexachlorobenzene	30.0	23.1		ug/L		77	52 - 131
Hexachlorocyclopentadiene	30.0	4.16	J	ug/L		14	10 - 129
Hexachloroethane	30.0	13.1		ug/L		44	41 - 120
Indene	30.0	22.5		ug/L		75	47 - 120
Isophorone	30.0	23.3		ug/L		78	49 - 120
2-Methylphenol	30.0	26.1		ug/L		87	39 - 123
3 & 4 Methylphenol	30.0	23.8		ug/L		79	38 - 121
2-Nitroaniline	30.0	27.1		ug/L		90	47 - 150
3-Nitroaniline	30.0	29.3		ug/L		98	34 - 132
4-Nitroaniline	30.0	35.3		ug/L		118	41 - 135
Nitrobenzene	30.0	22.7		ug/L		76	47 - 120
2-Nitrophenol	30.0	24.2		ug/L		81	28 - 136
4-Nitrophenol	60.0	61.2		ug/L		102	10 - 150
N-Nitrosodimethylamine	30.0	27.6		ug/L		92	22 - 148
N-Nitrosodi-n-propylamine	30.0	26.4		ug/L		88	44 - 120
N-Nitrosodiphenylamine	29.8	23.2		ug/L		78	56 - 120
Pentachlorophenol	60.0	43.4		ug/L		72	15 - 141
Phenol	30.0	19.6		ug/L		65	33 - 120
Pyridine	60.0	41.1		ug/L		68	26 - 120
Quinoline	30.0	27.0		ug/L		90	51 - 129
2,4,5-Trichlorophenol	30.0	24.3		ug/L		81	38 - 147
2,4,6-Trichlorophenol	30.0	22.6		ug/L		75	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*41*		*10 - 120*
Nitrobenzene-d5	*83*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*

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

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	80		15 - 135

Lab Sample ID: LCS 400-461393/4-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	76		34 - 120
2-Fluorophenol	37		10 - 120
Nitrobenzene-d5	80		27 - 120
Phenol-d5	55		10 - 120
Terphenyl-d14	94		53 - 125
2,4,6-Tribromophenol	29		15 - 135

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	25.9		ug/L		86	29 - 120	10	30
Benzoic acid	117	90.9		ug/L		78	10 - 150	15	30
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125	9	30
Bis(2-chloroethoxy)methane	30.0	26.2		ug/L		87	45 - 120	13	30
Bis(2-chloroethyl)ether	30.0	24.2		ug/L		81	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	30.1		ug/L		100	30 - 125	8	30
Bis(2-ethylhexyl) phthalate	30.0	27.0		ug/L		90	48 - 150	3	30
4-Bromophenyl phenyl ether	30.0	22.1		ug/L		74	55 - 122	0	30
Butyl benzyl phthalate	30.0	25.4		ug/L		85	46 - 145	0	30
4-Chloroaniline	30.0	22.8		ug/L		76	30 - 120	12	30
4-Chloro-3-methylphenol	30.0	28.3		ug/L		94	39 - 140	13	30
2-Chloronaphthalene	30.0	24.3		ug/L		81	52 - 120	11	30
2-Chlorophenol	30.0	23.8		ug/L		79	34 - 120	24	30
4-Chlorophenyl phenyl ether	30.0	22.5		ug/L		75	58 - 124	2	30
Dibenz[a,h]acridine	30.0	19.0		ug/L		63	46 - 149	16	30
Dibenzofuran	30.0	24.9		ug/L		83	58 - 123	3	30
3,3'-Dichlorobenzidine	40.0	39.0		ug/L		98	39 - 135	5	30
2,4-Dichlorophenol	30.0	26.7		ug/L		89	39 - 128	21	30
Diethyl phthalate	30.0	28.0		ug/L		93	44 - 146	5	30
2,4-Dimethylphenol	30.0	29.1		ug/L		97	44 - 120	14	30
Dimethyl phthalate	30.0	25.1		ug/L		84	50 - 131	7	30
Di-n-butyl phthalate	30.0	25.9		ug/L		86	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	56.9		ug/L		95	10 - 150	10	30
2,4-Dinitrophenol	60.0	67.6		ug/L		113	10 - 150	15	30
2,4-Dinitrotoluene	30.0	28.1		ug/L		94	58 - 140	7	30
2,6-Dinitrotoluene	30.0	26.8		ug/L		89	57 - 130	11	30

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

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	26.3		ug/L		88	50 - 150	0	30
1,4-Dioxane	30.0	19.2		ug/L		64	25 - 120	9	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	28.3		ug/L		94	47 - 123	4	30
Hexachlorobenzene	30.0	22.6		ug/L		75	52 - 131	2	30
Hexachlorocyclopentadiene	30.0	5.89	J *	ug/L		20	10 - 129	34	30
Hexachloroethane	30.0	21.2	*	ug/L		71	41 - 120	48	30
Indene	30.0	25.5		ug/L		85	47 - 120	13	30
Isophorone	30.0	26.0		ug/L		87	49 - 120	11	30
2-Methylphenol	30.0	29.7		ug/L		99	39 - 123	13	30
3 & 4 Methylphenol	30.0	26.8		ug/L		89	38 - 121	12	30
2-Nitroaniline	30.0	30.6		ug/L		102	47 - 150	12	30
3-Nitroaniline	30.0	31.2		ug/L		104	34 - 132	6	30
4-Nitroaniline	30.0	37.7		ug/L		126	41 - 135	7	30
Nitrobenzene	30.0	24.7		ug/L		82	47 - 120	9	30
2-Nitrophenol	30.0	30.4		ug/L		101	28 - 136	23	30
4-Nitrophenol	60.0	66.8		ug/L		111	10 - 150	9	30
N-Nitrosodimethylamine	30.0	31.3		ug/L		104	22 - 148	12	30
N-Nitrosodi-n-propylamine	30.0	28.4		ug/L		95	44 - 120	7	30
N-Nitrosodiphenylamine	29.8	24.5		ug/L		82	56 - 120	5	30
Pentachlorophenol	60.0	47.8		ug/L		80	15 - 141	10	30
Phenol	30.0	23.8		ug/L		79	33 - 120	19	30
Pyridine	60.0	46.1		ug/L		77	26 - 120	11	30
Quinoline	30.0	29.3		ug/L		98	51 - 129	8	30
2,4,5-Trichlorophenol	30.0	27.0		ug/L		90	38 - 147	11	30
2,4,6-Trichlorophenol	30.0	26.2		ug/L		87	36 - 139	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*63*		*10 - 120*
Nitrobenzene-d5	*96*		*27 - 120*
Phenol-d5	*84*		*10 - 120*
Terphenyl-d14	*88*		*53 - 125*
2,4,6-Tribromophenol	*87*		*15 - 135*

Lab Sample ID: LCSD 400-461393/5-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		1	10 - 120	49	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*34 - 120*
2-Fluorophenol	*16*		*10 - 120*
Nitrobenzene-d5	*71*		*27 - 120*
Phenol-d5	*39*		*10 - 120*
Terphenyl-d14	*92*		*53 - 125*

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

Lab Sample ID: LCSD 400-461393/5-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	23		15 - 135

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Anthracene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Chrysene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Fluoranthene	0.0426	J	0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Fluorene	ND		0.20	0.021	ug/L		10/14/19 08:18	10/23/19 07:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Phenanthrene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Pyrene	0.0497	J	0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	81		33 - 138	10/14/19 08:18	10/23/19 07:52	1
2-Fluorobiphenyl	74		15 - 122	10/14/19 08:18	10/23/19 07:52	1
Nitrobenzene-d5	79		19 - 130	10/14/19 08:18	10/23/19 07:52	1

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

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	26.2		ug/L		87	44 - 120
Anthracene	30.0	23.5		ug/L		78	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	25.8		ug/L		86	52 - 120
Benzo[b]fluoranthene	30.0	27.1		ug/L		90	53 - 134
Benzo[g,h,i]perylene	30.0	22.2		ug/L		74	47 - 133
Benzo[k]fluoranthene	30.0	25.8		ug/L		86	57 - 134
Chrysene	30.0	22.9		ug/L		76	55 - 122
Dibenz(a,h)anthracene	30.0	24.3		ug/L		81	48 - 146
Fluoranthene	30.0	23.9		ug/L		80	54 - 128

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

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	25.2		ug/L		84	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	23.6		ug/L		79	43 - 142
Phenanthrene	30.0	23.3		ug/L		78	48 - 120
Pyrene	30.0	24.8		ug/L		83	48 - 132
1-Methylnaphthalene	30.0	21.8		ug/L		73	41 - 120
2-Methylnaphthalene	30.0	21.1		ug/L		70	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*79*		*33 - 138*
2-Fluorobiphenyl	*78*		*15 - 122*
Nitrobenzene-d5	*76*		*19 - 130*

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	25.8		ug/L		86	41 - 120	5	56
Acenaphthylene	30.0	28.8		ug/L		96	44 - 120	9	56
Anthracene	30.0	23.5		ug/L		78	49 - 120	0	51
Benzo[a]anthracene	30.0	22.5		ug/L		75	61 - 135	4	49
Benzo[a]pyrene	30.0	25.3		ug/L		84	52 - 120	2	50
Benzo[b]fluoranthene	30.0	26.4		ug/L		88	53 - 134	3	54
Benzo[g,h,i]perylene	30.0	21.7		ug/L		72	47 - 133	2	50
Benzo[k]fluoranthene	30.0	25.7		ug/L		86	57 - 134	0	52
Chrysene	30.0	22.1		ug/L		74	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	24.0		ug/L		80	48 - 146	1	50
Fluoranthene	30.0	24.0		ug/L		80	54 - 128	0	52
Fluorene	30.0	26.2		ug/L		87	45 - 125	4	56
Indeno[1,2,3-cd]pyrene	30.0	23.4		ug/L		78	43 - 142	1	51
Phenanthrene	30.0	23.3		ug/L		78	48 - 120	0	56
Pyrene	30.0	23.7		ug/L		79	48 - 132	5	52
1-Methylnaphthalene	30.0	22.9		ug/L		76	41 - 120	5	55
2-Methylnaphthalene	30.0	22.8		ug/L		76	32 - 124	8	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*78*		*33 - 138*
2-Fluorobiphenyl	*82*		*15 - 122*
Nitrobenzene-d5	*82*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-460985/1-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460985

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		10/10/19 14:04	10/10/19 16:54	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-460985/1-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460985

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/10/19 14:04	10/10/19 16:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*10/10/19 14:04*	*10/10/19 16:54*	*1*

Lab Sample ID: LCS 400-460985/2-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460985

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.122		ug/L		122	60 - 140
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*51 - 149*

Lab Sample ID: LCSD 400-460985/3-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460985

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.118		ug/L		118	60 - 140	1	30
1,2-Dibromoethane	0.100	0.110		ug/L		110	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)
Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name: Bob Billman
PO #: 60592794 - 1.03.004 | 60592794 - 1.03.0044
PlaNet Site or Project ID: 25278
GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE 10/7/19
PAGE: 1 of 1

NAME (W/ COMPANY): AECOM
ENG CODE:
SITE ADDRESS (Street and City): 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60592794 - 1.03.004 | 60592794 - 1.03.0044
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102 USA
EDD DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com; elizabeth.kunkel@aecom.com; bob.billman@aecom.com
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): B. Howell B. Burleson
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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL
	TB-ROX-100719-8011	10/7/19	0000	Water	X					2			2	
	TB-ROX-100719-8260		0000		X					2	2			
	MW24-ROX-100719		0915		X			X		6	2	1	2	1
	MW16-ROX-100719		1005		X			X		6	2	1	2	1
	ROST4PZG-ROX-100719		1130		X			X		6	2	1	2	1

00-177634 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by (Signature): Bob Howell	Received by (Signature): Fedex: 1155 5318 3458 1155 5318 3470 1155 5318 3469	Date: 10/7/19	Time: 1600
Relinquished by (Signature):	Received by (Signature): n Tredaway	Date: 10/8/19	Time: 859
Relinquished by (Signature):	Received by (Signature):	Date:	Time:

Custody seal #s: 1106240, 1106241, 1106242, 1106243, 1106244, 1106245
4.3°C, 5.6°C, 3.8°C IR8

Version: 14Dec15

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177634-1

Login Number: 177634
List Number: 1
Creator: Gore, Beija K

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	1106242,1106243,1106245,1106241,1106240
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3°C, 5.6°C, 3.8 °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: 400-177634-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177718-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/25/2019

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

Sample Identification	Sample Identification
TB-ROX-100819-8011	TB-ROX-100819-8260
MW4-ROX-100819	MW25-ROX-100819
MW8-ROX-100819	MW7-ROX-100819
MW7-ROX-100819-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 and SVOCs were re-extracted outside of the extraction time criteria in sample MW8-ROX-100819. Several PAHs were detected in the method blanks. Several VOC and SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. SVOC/PAH surrogate recoveries were outside criteria in sample MW7-ROX-100819-Dup and several method blanks. The SVOC internal standard area recovery for perylene-d_{12} was outside criteria in sample MW7-ROX-100819, and several PAH internal standard area recoveries were outside criteria in the method blank. In field duplicate pair MW7-ROX-100819/MW7-ROX-100819-Dup, results for 2-methylnaphthalene were qualified due to field duplicate RPD above evaluation criteria, and results for 1-methylnaphthalene were qualified because the difference in results was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (**J**). Sample MW8-ROX-100819 and field duplicate pair MW7-ROX-100819/MW7-ROX-100819-Dup were diluted to bring VOCs and phenol into calibration range of the instrument. The continuing calibration verification for benzoic acid was outside evaluation criteria, biased low, and continuing calibration verification for bis(2-ethylhexyl) phthalate was outside acceptance criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, PAHs and SVOCs were re-extracted 8 days outside of the extraction time criteria (7

days) in sample MW8-ROX-100819 due to the sample being inadvertently being lost 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
MW8-ROX-100819	PAHs	All non-detects	**UJ**
MW8-ROX-100819	PAHs	1-Methylnaphthalene	**J**
MW8-ROX-100819	PAHs	2-Methylnaphthalene	**J**
MW8-ROX-100819	SVOCs	All non-detects	**UJ**
MW8-ROX-100819	SVOCs	Indene	**J**
MW8-ROX-100819	SVOCs	Phenol	**J**

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-461393/1-A	PAHs	Fluoranthene	0.0426 µg/L
MB 400-461393/1-A	PAHs	Pyrene	0.0497 µg/L
MB 400-461509/1-A	PAHs	Benzo[b]fluoranthene	0.154 µg/L
MB 400-462605/1-A	PAHs	Anthracene	0.0388 µg/L
MB 400-462605/1-A	PAHs	Benzo[a]anthracene	0.0872 µg/L
MB 400-462605/1-A	PAHs	Benzo[a]pyrene	0.0949 µg/L
MB 400-462605/1-A	PAHs	Benzo[b]fluoranthene	0.0858 µg/L
MB 400-462605/1-A	PAHs	Benzo[g,h,i]perylene	0.0798 µg/L
MB 400-462605/1-A	PAHs	Benzo[k]fluoranthene	0.0982 µg/L
MB 400-462605/1-A	PAHs	Chrysene	0.0787 µg/L
MB 400-462605/1-A	PAHs	Dibenz(a,h)anthracene	0.0892 µg/L
MB 400-462605/1-A	PAHs	Fluoranthene	0.0407 µg/L
MB 400-462605/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.0998 µg/L
MB 400-462605/1-A	PAHs	Phenanthrene	0.0375 µg/L
MB 400-462605/1-A	PAHs	Pyrene	0.0452 µg/L
MB 400-461509/1-A	PAHs	Fluoranthene – RA	0.0527 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 400-462264/1002	VOCs	Chloromethane	**145**	NA	58-137
LCS/LCSD 400-461393/4-A/5-A	SVOCs	Benzenethiol	**2/1**	**49**	10-120/30
LCS/LCSD 400-461393/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	14/20	**34**	10-129/30
LCS/LCSD 400-461393/2-A/3-A	SVOCs	Hexachloroethane	44/71	**48**	41-120/30
LCS/LCSD 400-461509/29-A/30-A	SVOCs	Benzenethiol	**2/4**	**57**	10-120/30
LCS/LCSD 400-461509/2-A/3-A	SVOCs	Aniline	97/71	**31**	29-120/30
LCS/LCSD 400-461509/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	149/83	**57**	48-150/30
LCS/LCSD 400-461509/2-A/3-A	SVOCs	Dibenz[a,h]acridine	81/59	**31**	46-149/30
LCS/LCSD 400-461509/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**5/5**	4	10-129/30
LCS/LCSD 400-462605/6-A/7-A	SVOCs	Benzenethiol	**3/3**	1	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol and hexachlorocyclopentadiene; benzenethiol and hexachlorocyclopentadiene have been identified as poor performing analytes under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-100819	SVOCs	Benzenethiol	**UJ**
MW25-ROX-100819	SVOCs	Benzenethiol	**UJ**
MW7-ROX-100819	SVOCs	Benzenethiol	**UJ**
MW7-ROX-100819	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW7-ROX-100819-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW7-ROX-100819-Dup	SVOCs	Terphenyl-d_{14}	**44**	53-125
MB 400-461509/1-A	PAHs	Terphenyl-d_{14}	**235**	33-138
MB 400-461509/1-A	PAHs	2-Fluorobiphenyl	**163**	15-122
MB 400-461509/1-A	PAHs	Nitrobenzene-d_5	**159**	19-130
MB 400-462605/1-A	PAHs	Terphenyl-d_{14}	**144**	33-138

Qualifications due to surrogate recoveries were not required if only one of three base/neutral SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Method blanks are quality control samples and do not require qualification. 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
MW7-ROX-100819	SVOCs	Perylene-d_{12}	**260660**	354534-1418134
MB 400-461509/1-A	PAHs	Acenaphthene-d_{10}	**289678**	302295-1209178
MB 400-461509/1-A	PAHs	Phenanthrene-d_{10}	**426704**	436493-1745972

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW7-ROX-100819	MW7-ROX-100819-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW7-ROX-100819	MW7-ROX-100819-Dup	PAHs	1-Methylnaphthalene	**> 2X RL**	**J/J**
MW7-ROX-100819	MW7-ROX-100819-Dup	PAHs	2-Methylnaphthalene	**74**	**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 benzoic acid was below acceptance criteria, and bis(2-ethylhexyl) phthalate was outside acceptance criteria, biased high, and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-100819	SVOCs	Benzoic acid	**UJ**
MW25-ROX-100819	SVOCs	Benzoic acid	**UJ**
MW7-ROX-100819	SVOCs	Benzoic acid	**UJ**
MW7-ROX-100819-Dup	SVOCs	Benzoic acid	**J**
MW7-ROX-100819-Dup	SVOCs	bis(2-Ethylhexyl) phthalate	**J**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-177718-1
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:
11/6/2019 11:59:51 AM

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

LINKS

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Reviewed 11/25/19

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: 400-177718-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177718-1

Comments
No additional comments.

Receipt
The samples were received on 10/9/2019 8:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.8° C, 4.0° C, 4.6° C and 5.7° C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) for analytical batch 400-462264 recovered outside control limits for the following analytes: Chloromethane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW8-ROX-100819 (400-177718-5), MW7-ROX-100819 (400-177718-6) and MW7-ROX-100819-DUP (400-177718-7). Elevated reporting limits (RLs) are provided.

Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-100819-8260 (400-177718-2), MW4-ROX-100819 (400-177718-3), MW25-ROX-100819 (400-177718-4), MW8-ROX-100819 (400-177718-5), MW7-ROX-100819 (400-177718-6) and MW7-ROX-100819-DUP (400-177718-7). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compounds that degrades in an acidic medium.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-451121 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

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

GC/MS Semi VOA
Method 8270D: The initial calibration verification (ICV) analyzed in batch 400-457655 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-461509 and analytical batch 400-463207 recovered outside control limits for the following analyte: Benzenethiol, Hexachlorocyclopentadiene. Benzenethiol, Hexachlorocyclopentadiene has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461509 and analytical batch 400-463207 recovered outside control limits for the following analytes: Benzenethiol, Bis(2-ethylhexyl) phthalate, Dibenz[a,h]acridine and Aniline.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463207 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, 2-Methylphenol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463207 recovered outside acceptance criteria, low biased, for Benzoic acid. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

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

Job ID: 400-177718-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW7-ROX-100819-DUP (400-177718-7), (ICV 400-462934/20). These results have been reported and qualified.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-461393 and analytical batch 400-462843 recovered outside control limits for the following analyte: Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461393 and analytical batch 400-462843 recovered outside control limits for the following analytes: Benzenethiol, Hexachlorocyclopentadiene and Hexachloroethane.

Method 8270D: The internal standard Perylene-d12 response were outside of acceptance limits for the following sample: MW7-ROX-100819 (400-177718-6). Results for the affected analytes are possibly biased high, non-detect are qualified accordingly; therefore, the data have been reported.

Method 8270D: The initial calibration verification (ICV) analyzed in batch 400-462934 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464293 recovered above the upper control limit for Indene. The samples associated with this CCV were less than the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462605 and analytical batch 400-464293 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: Re-extraction and/or re-analysis was performed outside of the method defined holding-time due to the sample was lost during the initial extraction process.

Method 8270D LL: The method blank for preparation batch 400-461393 and analytical batch 400-462759 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 8270D LL: The method blank for preparation batch 400-461509 and analytical batch 400-463641 contained Fluoranthene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8270D LL: The method blank for preparation batch 400-462605 and analytical batch 400-464437 contained Indeno[1,2,3-cd]pyrene, Pyrene, Benzo[b]fluoranthene, Fluoranthene, Phenanthrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Benzo[a]anthracene, Benzo[a]pyrene 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.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-461023 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

Job ID: 400-177718-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 3520C: The following sample MW8-ROX-100819 (400-177718-5) was lost during the initial extraction, the sample was re-prepared outside of preparation holding time.

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: 400-177718-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177718-1	TB-ROX-100819-8011	Water	10/08/19 00:00	10/09/19 08:55	
400-177718-2	TB-ROX-100819-8260	Water	10/08/19 00:00	10/09/19 08:55	
400-177718-3	MW4-ROX-100819	Water	10/08/19 09:00	10/09/19 08:55	
400-177718-4	MW25-ROX-100819	Water	10/08/19 10:05	10/09/19 08:55	
400-177718-5	MW8-ROX-100819	Water	10/08/19 11:55	10/09/19 08:55	
400-177718-6	MW7-ROX-100819	Water	10/08/19 13:40	10/09/19 08:55	
400-177718-7	MW7-ROX-100819-DUP	Water	10/08/19 13:40	10/09/19 08:55	

Detection Summary

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

Job ID: 400-177718-1

Client Sample ID: TB-ROX-100819-8011

Lab Sample ID: 400-177718-1

No Detections.

Client Sample ID: TB-ROX-100819-8260

Lab Sample ID: 400-177718-2

No Detections.

Client Sample ID: MW4-ROX-100819

Lab Sample ID: 400-177718-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.049	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW25-ROX-100819

Lab Sample ID: 400-177718-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acrylonitrile	20		10	2.8	ug/L	1		8260B	Total/NA
Benzene	44		1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	4.1		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: MW8-ROX-100819

Lab Sample ID: 400-177718-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	110000		500	190	ug/L	500		8260B	Total/NA
Ethylbenzene	400	J	500	250	ug/L	500		8260B	Total/NA
Naphthalene	1200		500	500	ug/L	500		8260B	Total/NA
o-Xylene	380	J	2500	300	ug/L	500		8260B	Total/NA
Toluene	290	J	500	210	ug/L	500		8260B	Total/NA
Xylenes, Total	1000	J	5000	800	ug/L	500		8260B	Total/NA
1-Methylnaphthalene	8.2	H	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.9	H	0.19	0.019	ug/L	1		8270D LL	Total/NA
Indene	2.7	J H	9.5	0.95	ug/L	1		8270D	Total/NA
Phenol - DL	270	H	48	12	ug/L	5		8270D	Total/NA

Client Sample ID: MW7-ROX-100819

Lab Sample ID: 400-177718-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	1700000		10000	3800	ug/L	10000		8260B	Total/NA
1-Methylnaphthalene	1.7		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.6		0.19	0.019	ug/L	1		8270D LL	Total/NA
2,4-Dimethylphenol	4.5	J	9.6	3.4	ug/L	1		8270D	Total/NA
Indene	2.2	J	9.6	0.96	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	2.4	J	19	1.0	ug/L	1		8270D	Total/NA
Phenol - DL	140		48	12	ug/L	5		8270D	Total/NA

Client Sample ID: MW7-ROX-100819-DUP

Lab Sample ID: 400-177718-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	1600000		10000	3800	ug/L	10000		8260B	Total/NA
1-Methylnaphthalene	0.73		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.2		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzoic acid	9.3	J	29	7.0	ug/L	1		8270D	Total/NA
Bis(2-ethylhexyl) phthalate	4.9	J	9.6	4.8	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.2	J	19	1.0	ug/L	1		8270D	Total/NA
Phenol - DL	70		48	12	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-100819-8011
Date Collected: 10/08/19 00:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-1
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		0.028	0.0052	ug/L		10/10/19 14:05	10/10/19 18:05	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		10/10/19 14:05	10/10/19 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*10/10/19 14:05*	*10/10/19 18:05*	*1*

Client Sample ID: TB-ROX-100819-8260
Date Collected: 10/08/19 00:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-2
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			10/19/19 19:13	1
Acrolein	ND		20	10	ug/L			10/19/19 19:13	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 19:13	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 19:13	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 19:13	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 19:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 19:13	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 19:13	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 19:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 19:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 19:13	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 19:13	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 19:13	1
Chloromethane	ND	*	1.0	0.83	ug/L			10/19/19 19:13	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 19:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 19:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 19:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 19:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 19:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 19:13	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 19:13	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 19:13	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 19:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 19:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 19:13	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 19:13	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 19:13	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 19:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 19:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 19:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 19:13	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 19:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 19:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 19:13	1

Client Sample ID: TB-ROX-100819-8260
Date Collected: 10/08/19 00:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-2
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			10/19/19 19:13	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 19:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 19:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 19:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 19:13	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 19:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 19:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 19:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 19:13	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 19:13	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 19:13	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 19:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 19:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 19:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 19:13	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 19:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 19:13	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*10/19/19 19:13*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/19/19 19:13*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/19/19 19:13*	*1*

Client Sample ID: MW4-ROX-100819
Date Collected: 10/08/19 09:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-3
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			10/19/19 21:37	1
Acrolein	ND		20	10	ug/L			10/19/19 21:37	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 21:37	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 21:37	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 21:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 21:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 21:37	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 21:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 21:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 21:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 21:37	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 21:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 21:37	1
Chloromethane	ND	*	1.0	0.83	ug/L			10/19/19 21:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 21:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 21:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 21:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 21:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 21:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 21:37	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 21:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 21:37	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 21:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 21:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 21:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 21:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 21:37	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 21:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 21:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 21:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 21:37	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 21:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 21:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 21:37	1

Client Sample ID: MW4-ROX-100819
Date Collected: 10/08/19 09:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-3
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			10/19/19 21:37	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 21:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 21:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 21:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 21:37	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 21:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 21:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 21:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 21:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 21:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 21:37	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 21:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 21:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 21:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 21:37	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 21:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 21:37	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/19/19 21:37*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*10/19/19 21:37*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*10/19/19 21:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
Anthracene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Chrysene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Fluoranthene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
Fluorene	ND		0.19	0.020	ug/L		10/14/19 08:18	10/23/19 12:50	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 12:50	1
Phenanthrene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
Pyrene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
1-Methylnaphthalene	0.049	J	0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*33 - 138*	*10/14/19 08:18*	*10/23/19 12:50*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*10/14/19 08:18*	*10/23/19 12:50*	*1*

Client Sample ID: MW4-ROX-100819
Date Collected: 10/08/19 09:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80		19 - 130	10/14/19 08:18	10/23/19 12:50	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		10/14/19 08:18	10/25/19 20:33	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/14/19 08:18	10/25/19 20:33	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/14/19 08:18	10/25/19 20:33	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/14/19 08:18	10/25/19 20:33	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/14/19 08:18	10/25/19 20:33	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		10/14/19 08:18	10/25/19 20:33	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/14/19 08:18	10/25/19 20:33	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/14/19 08:18	10/25/19 20:33	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		10/14/19 08:18	10/25/19 20:33	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/14/19 08:18	10/25/19 20:33	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/14/19 08:18	10/25/19 20:33	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/14/19 08:18	10/25/19 20:33	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/14/19 08:18	10/25/19 20:33	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/14/19 08:18	10/25/19 20:33	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/14/19 08:18	10/25/19 20:33	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/14/19 08:18	10/25/19 20:33	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/14/19 08:18	10/25/19 20:33	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/14/19 08:18	10/25/19 20:33	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/14/19 08:18	10/25/19 20:33	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/14/19 08:18	10/25/19 20:33	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/14/19 08:18	10/25/19 20:33	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/14/19 08:18	10/25/19 20:33	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/14/19 08:18	10/25/19 20:33	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/14/19 08:18	10/25/19 20:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/14/19 08:18	10/25/19 20:33	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/14/19 08:18	10/25/19 20:33	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/14/19 08:18	10/25/19 20:33	1
Hexachloroethane	ND	*	9.5	4.0	ug/L		10/14/19 08:18	10/25/19 20:33	1
Indene	ND		9.5	0.95	ug/L		10/14/19 08:18	10/25/19 20:33	1
Isophorone	ND		9.5	0.54	ug/L		10/14/19 08:18	10/25/19 20:33	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/14/19 08:18	10/25/19 20:33	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/14/19 08:18	10/25/19 20:33	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/14/19 08:18	10/25/19 20:33	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/14/19 08:18	10/25/19 20:33	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/14/19 08:18	10/25/19 20:33	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/14/19 08:18	10/25/19 20:33	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/14/19 08:18	10/25/19 20:33	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/14/19 08:18	10/25/19 20:33	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/14/19 08:18	10/25/19 20:33	1

Client Sample ID: MW4-ROX-100819
Date Collected: 10/08/19 09:00
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/14/19 08:18	10/25/19 20:33	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/14/19 08:18	10/25/19 20:33	1
Pentachlorophenol	ND		19	1.7	ug/L		10/14/19 08:18	10/25/19 20:33	1
Phenol	ND		9.5	2.5	ug/L		10/14/19 08:18	10/25/19 20:33	1
Pyridine	ND		9.5	3.1	ug/L		10/14/19 08:18	10/25/19 20:33	1
Quinoline	ND		9.5	5.7	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/14/19 08:18	10/25/19 20:33	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/14/19 08:18	10/25/19 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*34 - 120*	*10/14/19 08:18*	*10/25/19 20:33*	*1*
2-Fluorophenol	*34*		*10 - 120*	*10/14/19 08:18*	*10/25/19 20:33*	*1*
Nitrobenzene-d5	*77*		*27 - 120*	*10/14/19 08:18*	*10/25/19 20:33*	*1*
Phenol-d5	*62*		*10 - 120*	*10/14/19 08:18*	*10/25/19 20:33*	*1*
Terphenyl-d14	*83*		*53 - 125*	*10/14/19 08:18*	*10/25/19 20:33*	*1*
2,4,6-Tribromophenol	*81*		*15 - 135*	*10/14/19 08:18*	*10/25/19 20:33*	*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	0.0052	ug/L		10/10/19 14:05	10/10/19 18:29	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/10/19 14:05	10/10/19 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*10/10/19 14:05*	*10/10/19 18:29*	*1*

Client Sample Results

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

Job ID: 400-177718-1

Client Sample ID: MW25-ROX-100819
Date Collected: 10/08/19 10:05
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-4
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			10/19/19 22:01	1
Acrolein	ND		20	10	ug/L			10/19/19 22:01	1
Acrylonitrile	20		10	2.8	ug/L			10/19/19 22:01	1
Benzene	44		1.0	0.38	ug/L			10/19/19 22:01	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 22:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 22:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 22:01	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 22:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 22:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 22:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 22:01	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 22:01	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 22:01	1
Chloromethane	ND	*	1.0	0.83	ug/L			10/19/19 22:01	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 22:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 22:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 22:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 22:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 22:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 22:01	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 22:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 22:01	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 22:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 22:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 22:01	1
Methyl tert-butyl ether	4.1		1.0	0.74	ug/L			10/19/19 22:01	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 22:01	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 22:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 22:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 22:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 22:01	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 22:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 22:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 22:01	1

Client Sample ID: MW25-ROX-100819
Date Collected: 10/08/19 10:05
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-4
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			10/19/19 22:01	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 22:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 22:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 22:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 22:01	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 22:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 22:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 22:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 22:01	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 22:01	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 22:01	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 22:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 22:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 22:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 22:01	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 22:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 22:01	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*10/19/19 22:01*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*10/19/19 22:01*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/19/19 22:01*	*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		10/14/19 08:18	10/23/19 13:08	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1
Anthracene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Chrysene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Fluoranthene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1
Fluorene	ND		0.19	0.020	ug/L		10/14/19 08:18	10/23/19 13:08	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:08	1
Phenanthrene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1
Pyrene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*33 - 138*	*10/14/19 08:18*	*10/23/19 13:08*	*1*
2-Fluorobiphenyl	*86*		*15 - 122*	*10/14/19 08:18*	*10/23/19 13:08*	*1*

Client Sample ID: MW25-ROX-100819
Date Collected: 10/08/19 10:05
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	93		19 - 130	10/14/19 08:18	10/23/19 13:08	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		10/14/19 08:18	10/25/19 20:58	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/14/19 08:18	10/25/19 20:58	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/14/19 08:18	10/25/19 20:58	1
Benzyl alcohol	ND		9.6	1.9	ug/L		10/14/19 08:18	10/25/19 20:58	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/14/19 08:18	10/25/19 20:58	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/14/19 08:18	10/25/19 20:58	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/14/19 08:18	10/25/19 20:58	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		10/14/19 08:18	10/25/19 20:58	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/14/19 08:18	10/25/19 20:58	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/14/19 08:18	10/25/19 20:58	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/14/19 08:18	10/25/19 20:58	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/14/19 08:18	10/25/19 20:58	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/14/19 08:18	10/25/19 20:58	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/14/19 08:18	10/25/19 20:58	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/14/19 08:18	10/25/19 20:58	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/14/19 08:18	10/25/19 20:58	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/14/19 08:18	10/25/19 20:58	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/14/19 08:18	10/25/19 20:58	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/14/19 08:18	10/25/19 20:58	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/14/19 08:18	10/25/19 20:58	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/14/19 08:18	10/25/19 20:58	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/14/19 08:18	10/25/19 20:58	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/14/19 08:18	10/25/19 20:58	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/14/19 08:18	10/25/19 20:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/14/19 08:18	10/25/19 20:58	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/14/19 08:18	10/25/19 20:58	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/14/19 08:18	10/25/19 20:58	1
Hexachloroethane	ND	*	9.6	4.0	ug/L		10/14/19 08:18	10/25/19 20:58	1
Indene	ND		9.6	0.96	ug/L		10/14/19 08:18	10/25/19 20:58	1
Isophorone	ND		9.6	0.55	ug/L		10/14/19 08:18	10/25/19 20:58	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/14/19 08:18	10/25/19 20:58	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/14/19 08:18	10/25/19 20:58	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/14/19 08:18	10/25/19 20:58	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/14/19 08:18	10/25/19 20:58	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/14/19 08:18	10/25/19 20:58	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/14/19 08:18	10/25/19 20:58	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/14/19 08:18	10/25/19 20:58	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/14/19 08:18	10/25/19 20:58	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/14/19 08:18	10/25/19 20:58	1

Client Sample ID: MW25-ROX-100819
Date Collected: 10/08/19 10:05
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/14/19 08:18	10/25/19 20:58	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/14/19 08:18	10/25/19 20:58	1
Pentachlorophenol	ND		19	1.7	ug/L		10/14/19 08:18	10/25/19 20:58	1
Phenol	ND		9.6	2.5	ug/L		10/14/19 08:18	10/25/19 20:58	1
Pyridine	ND		9.6	3.1	ug/L		10/14/19 08:18	10/25/19 20:58	1
Quinoline	ND		9.6	5.7	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/14/19 08:18	10/25/19 20:58	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/14/19 08:18	10/25/19 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*34 - 120*	*10/14/19 08:18*	*10/25/19 20:58*	*1*
2-Fluorophenol	*32*		*10 - 120*	*10/14/19 08:18*	*10/25/19 20:58*	*1*
Nitrobenzene-d5	*87*		*27 - 120*	*10/14/19 08:18*	*10/25/19 20:58*	*1*
Phenol-d5	*56*		*10 - 120*	*10/14/19 08:18*	*10/25/19 20:58*	*1*
Terphenyl-d14	*95*		*53 - 125*	*10/14/19 08:18*	*10/25/19 20:58*	*1*
2,4,6-Tribromophenol	*76*		*15 - 135*	*10/14/19 08:18*	*10/25/19 20:58*	*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	0.0053	ug/L		10/10/19 14:05	10/10/19 18:52	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/10/19 14:05	10/10/19 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*10/10/19 14:05*	*10/10/19 18:52*	*1*

Client Sample ID: MW8-ROX-100819
Date Collected: 10/08/19 11:55
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-5
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			10/20/19 00:01	500
Acrolein	ND		10000	5000	ug/L			10/20/19 00:01	500
Acrylonitrile	ND		5000	1400	ug/L			10/20/19 00:01	500
Benzene	110000		500	190	ug/L			10/20/19 00:01	500
Bromobenzene	ND		500	270	ug/L			10/20/19 00:01	500
Bromochloromethane	ND		500	260	ug/L			10/20/19 00:01	500
Bromodichloromethane	ND		500	250	ug/L			10/20/19 00:01	500
Bromoform	ND		2500	360	ug/L			10/20/19 00:01	500
Bromomethane	ND		500	490	ug/L			10/20/19 00:01	500
2-Butanone (MEK)	ND		13000	1300	ug/L			10/20/19 00:01	500
Carbon disulfide	ND		500	250	ug/L			10/20/19 00:01	500
Carbon tetrachloride	ND		500	250	ug/L			10/20/19 00:01	500
Chlorobenzene	ND		500	250	ug/L			10/20/19 00:01	500
Dibromochloromethane	ND		500	250	ug/L			10/20/19 00:01	500
Chloroethane	ND		500	380	ug/L			10/20/19 00:01	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			10/20/19 00:01	500
Chloroform	ND		500	300	ug/L			10/20/19 00:01	500
1-Chlorohexane	ND		500	350	ug/L			10/20/19 00:01	500
Chloromethane	ND	*	500	420	ug/L			10/20/19 00:01	500
cis-1,2-Dichloroethene	ND		500	250	ug/L			10/20/19 00:01	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			10/20/19 00:01	500
1,2-Dichlorobenzene	ND		500	250	ug/L			10/20/19 00:01	500
1,3-Dichlorobenzene	ND		500	270	ug/L			10/20/19 00:01	500
1,4-Dichlorobenzene	ND		500	320	ug/L			10/20/19 00:01	500
Dichlorodifluoromethane	ND		500	430	ug/L			10/20/19 00:01	500
1,1-Dichloroethane	ND		500	250	ug/L			10/20/19 00:01	500
1,2-Dichloroethane	ND		500	250	ug/L			10/20/19 00:01	500
1,1-Dichloroethene	ND		500	250	ug/L			10/20/19 00:01	500
1,2-Dichloropropane	ND		500	250	ug/L			10/20/19 00:01	500
1,3-Dichloropropane	ND		500	250	ug/L			10/20/19 00:01	500
2,2-Dichloropropane	ND		500	250	ug/L			10/20/19 00:01	500
1,1-Dichloropropene	ND		500	250	ug/L			10/20/19 00:01	500
Ethylbenzene	400	J	500	250	ug/L			10/20/19 00:01	500
Ethyl methacrylate	ND		500	300	ug/L			10/20/19 00:01	500
Hexachlorobutadiene	ND		2500	450	ug/L			10/20/19 00:01	500
2-Hexanone	ND		13000	1600	ug/L			10/20/19 00:01	500
Isopropylbenzene	ND		500	270	ug/L			10/20/19 00:01	500
Methylene bromide	ND		2500	300	ug/L			10/20/19 00:01	500
Methylene Chloride	ND		2500	1500	ug/L			10/20/19 00:01	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			10/20/19 00:01	500
Methyl tert-butyl ether	ND		500	370	ug/L			10/20/19 00:01	500
m-Xylene & p-Xylene	ND		2500	800	ug/L			10/20/19 00:01	500
Naphthalene	1200		500	500	ug/L			10/20/19 00:01	500
n-Butylbenzene	ND		500	380	ug/L			10/20/19 00:01	500
N-Propylbenzene	ND		500	350	ug/L			10/20/19 00:01	500
o-Chlorotoluene	ND		500	290	ug/L			10/20/19 00:01	500
o-Xylene	380	J	2500	300	ug/L			10/20/19 00:01	500
p-Chlorotoluene	ND		500	280	ug/L			10/20/19 00:01	500
p-Isopropyltoluene	ND		500	360	ug/L			10/20/19 00:01	500

Client Sample ID: MW8-ROX-100819
Date Collected: 10/08/19 11:55
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		500	350	ug/L			10/20/19 00:01	500
Styrene	ND		500	500	ug/L			10/20/19 00:01	500
tert-Butylbenzene	ND		500	320	ug/L			10/20/19 00:01	500
1,1,1,2-Tetrachloroethane	ND		500	260	ug/L			10/20/19 00:01	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			10/20/19 00:01	500
Tetrachloroethene	ND		500	290	ug/L			10/20/19 00:01	500
Toluene	290	J	500	210	ug/L			10/20/19 00:01	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			10/20/19 00:01	500
trans-1,3-Dichloropropene	ND		2500	250	ug/L			10/20/19 00:01	500
1,2,3-Trichlorobenzene	ND		500	350	ug/L			10/20/19 00:01	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			10/20/19 00:01	500
1,1,1-Trichloroethane	ND		500	250	ug/L			10/20/19 00:01	500
1,1,2-Trichloroethane	ND		2500	250	ug/L			10/20/19 00:01	500
Trichloroethene	ND		500	250	ug/L			10/20/19 00:01	500
Trichlorofluoromethane	ND		500	260	ug/L			10/20/19 00:01	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			10/20/19 00:01	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			10/20/19 00:01	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			10/20/19 00:01	500
Vinyl acetate	ND		13000	1000	ug/L			10/20/19 00:01	500
Vinyl chloride	ND		500	250	ug/L			10/20/19 00:01	500
Xylenes, Total	1000	J	5000	800	ug/L			10/20/19 00:01	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*78 - 118*		*10/20/19 00:01*	*500*
Dibromofluoromethane	*101*		*81 - 121*		*10/20/19 00:01*	*500*
Toluene-d8 (Surr)	*84*		*80 - 120*		*10/20/19 00:01*	*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	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
Acenaphthylene	ND	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
Anthracene	ND	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
Benzo[a]anthracene	ND	H *	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Benzo[a]pyrene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Benzo[b]fluoranthene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Benzo[g,h,i]perylene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Benzo[k]fluoranthene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Chrysene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Dibenz(a,h)anthracene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Fluoranthene	ND	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
Fluorene	ND	H	0.19	0.020	ug/L		10/23/19 12:04	11/01/19 22:06	1
Indeno[1,2,3-cd]pyrene	ND	H	0.19	0.038	ug/L		10/23/19 12:04	11/01/19 22:06	1
Phenanthrene	ND	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
Pyrene	ND	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
1-Methylnaphthalene	8.2	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1
2-Methylnaphthalene	1.9	H	0.19	0.019	ug/L		10/23/19 12:04	11/01/19 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*53*		*33 - 138*	*10/23/19 12:04*	*11/01/19 22:06*	*1*
2-Fluorobiphenyl	*68*		*15 - 122*	*10/23/19 12:04*	*11/01/19 22:06*	*1*

Client Sample ID: MW8-ROX-100819
Date Collected: 10/08/19 11:55
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	62		19 - 130	10/23/19 12:04	11/01/19 22:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H UJ	9.5	3.6	ug/L		10/23/19 12:04	11/02/19 12:39	1
Benzenethiol	ND	H *	9.5	1.6	ug/L		10/23/19 12:04	11/02/19 12:39	1
Benzoic acid	ND	H	29	6.9	ug/L		10/23/19 12:04	11/02/19 12:39	1
Benzyl alcohol	ND	H	9.5	1.9	ug/L		10/23/19 12:04	11/02/19 12:39	1
Bis(2-chloroethoxy)methane	ND	H	9.5	0.66	ug/L		10/23/19 12:04	11/02/19 12:39	1
Bis(2-chloroethyl)ether	ND	H	9.5	0.70	ug/L		10/23/19 12:04	11/02/19 12:39	1
bis (2-chloroisopropyl) ether	ND	H	9.5	0.77	ug/L		10/23/19 12:04	11/02/19 12:39	1
Bis(2-ethylhexyl) phthalate	ND	H	9.5	4.8	ug/L		10/23/19 12:04	11/02/19 12:39	1
4-Bromophenyl phenyl ether	ND	H	9.5	0.30	ug/L		10/23/19 12:04	11/02/19 12:39	1
Butyl benzyl phthalate	ND	H	9.5	0.66	ug/L		10/23/19 12:04	11/02/19 12:39	1
4-Chloroaniline	ND	H	9.5	3.2	ug/L		10/23/19 12:04	11/02/19 12:39	1
4-Chloro-3-methylphenol	ND	H	9.5	3.6	ug/L		10/23/19 12:04	11/02/19 12:39	1
2-Chloronaphthalene	ND	H	9.5	0.49	ug/L		10/23/19 12:04	11/02/19 12:39	1
2-Chlorophenol	ND	H	9.5	2.1	ug/L		10/23/19 12:04	11/02/19 12:39	1
4-Chlorophenyl phenyl ether	ND	H	9.5	1.9	ug/L		10/23/19 12:04	11/02/19 12:39	1
Dibenz[a,h]acridine	ND	H	9.5	2.9	ug/L		10/23/19 12:04	11/02/19 12:39	1
Dibenzofuran	ND	H	9.5	0.49	ug/L		10/23/19 12:04	11/02/19 12:39	1
3,3'-Dichlorobenzidine	ND	H	9.5	2.5	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,4-Dichlorophenol	ND	H	9.5	2.9	ug/L		10/23/19 12:04	11/02/19 12:39	1
Diethyl phthalate	ND	H	9.5	0.67	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,4-Dimethylphenol	ND	H	9.5	3.3	ug/L		10/23/19 12:04	11/02/19 12:39	1
Dimethyl phthalate	ND	H	9.5	0.57	ug/L		10/23/19 12:04	11/02/19 12:39	1
Di-n-butyl phthalate	ND	H	9.5	2.6	ug/L		10/23/19 12:04	11/02/19 12:39	1
4,6-Dinitro-ortho-cresol	ND	H	9.5	1.9	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,4-Dinitrophenol	ND	H	29	3.2	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,4-Dinitrotoluene	ND	H	9.5	1.8	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,6-Dinitrotoluene	ND	H	9.5	1.8	ug/L		10/23/19 12:04	11/02/19 12:39	1
Di-n-octyl phthalate	ND	H	9.5	0.42	ug/L		10/23/19 12:04	11/02/19 12:39	1
1,4-Dioxane	ND	H	9.5	0.95	ug/L		10/23/19 12:04	11/02/19 12:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.5	0.95	ug/L		10/23/19 12:04	11/02/19 12:39	1
Hexachlorobenzene	ND	H	9.5	0.24	ug/L		10/23/19 12:04	11/02/19 12:39	1
Hexachlorocyclopentadiene	ND	H	19	2.5	ug/L		10/23/19 12:04	11/02/19 12:39	1
Hexachloroethane	ND	H	9.5	4.0	ug/L		10/23/19 12:04	11/02/19 12:39	1
Indene	2.7	J H J	9.5	0.95	ug/L		10/23/19 12:04	11/02/19 12:39	1
Isophorone	ND	H UJ	9.5	0.54	ug/L		10/23/19 12:04	11/02/19 12:39	1
2-Methylphenol	ND	H	9.5	1.7	ug/L		10/23/19 12:04	11/02/19 12:39	1
3 & 4 Methylphenol	ND	H	19	0.99	ug/L		10/23/19 12:04	11/02/19 12:39	1
2-Nitroaniline	ND	H	9.5	2.1	ug/L		10/23/19 12:04	11/02/19 12:39	1
3-Nitroaniline	ND	H	9.5	1.7	ug/L		10/23/19 12:04	11/02/19 12:39	1
4-Nitroaniline	ND	H	9.5	2.4	ug/L		10/23/19 12:04	11/02/19 12:39	1
Nitrobenzene	ND	H	9.5	0.52	ug/L		10/23/19 12:04	11/02/19 12:39	1
2-Nitrophenol	ND	H	9.5	0.62	ug/L		10/23/19 12:04	11/02/19 12:39	1
4-Nitrophenol	ND	H	9.5	2.0	ug/L		10/23/19 12:04	11/02/19 12:39	1
N-Nitrosodimethylamine	ND	H	9.5	3.3	ug/L		10/23/19 12:04	11/02/19 12:39	1

Client Sample ID: MW8-ROX-100819
Date Collected: 10/08/19 11:55
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-5
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	H UJ	9.5	3.1	ug/L		10/23/19 12:04	11/02/19 12:39	1
N-Nitrosodiphenylamine	ND	H	9.5	0.45	ug/L		10/23/19 12:04	11/02/19 12:39	1
Pentachlorophenol	ND	H	19	1.7	ug/L		10/23/19 12:04	11/02/19 12:39	1
Pyridine	ND	H	9.5	3.0	ug/L		10/23/19 12:04	11/02/19 12:39	1
Quinoline	ND	H	9.5	5.7	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,4,5-Trichlorophenol	ND	H	9.5	3.5	ug/L		10/23/19 12:04	11/02/19 12:39	1
2,4,6-Trichlorophenol	ND	H	9.5	3.3	ug/L		10/23/19 12:04	11/02/19 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*34 - 120*	*10/23/19 12:04*	*11/02/19 12:39*	*1*
2-Fluorophenol	*25*		*10 - 120*	*10/23/19 12:04*	*11/02/19 12:39*	*1*
Nitrobenzene-d5	*90*		*27 - 120*	*10/23/19 12:04*	*11/02/19 12:39*	*1*
Phenol-d5	*47*		*10 - 120*	*10/23/19 12:04*	*11/02/19 12:39*	*1*
Terphenyl-d14	*63*		*53 - 125*	*10/23/19 12:04*	*11/02/19 12:39*	*1*
2,4,6-Tribromophenol	*105*		*15 - 135*	*10/23/19 12:04*	*11/02/19 12:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	270	H J	48	12	ug/L		10/23/19 12:04	11/03/19 12:34	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/10/19 14:05	10/10/19 19:16	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/10/19 14:05	10/10/19 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*10/10/19 14:05*	*10/10/19 19:16*	*1*

Client Sample ID: MW7-ROX-100819
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			10/20/19 00:25	5000
Acrolein	ND		100000	50000	ug/L			10/20/19 00:25	5000
Acrylonitrile	ND		50000	14000	ug/L			10/20/19 00:25	5000
Bromobenzene	ND		5000	2700	ug/L			10/20/19 00:25	5000
Bromochloromethane	ND		5000	2600	ug/L			10/20/19 00:25	5000
Bromodichloromethane	ND		5000	2500	ug/L			10/20/19 00:25	5000
Bromoform	ND		25000	3600	ug/L			10/20/19 00:25	5000
Bromomethane	ND		5000	4900	ug/L			10/20/19 00:25	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			10/20/19 00:25	5000
Carbon disulfide	ND		5000	2500	ug/L			10/20/19 00:25	5000
Carbon tetrachloride	ND		5000	2500	ug/L			10/20/19 00:25	5000
Chlorobenzene	ND		5000	2500	ug/L			10/20/19 00:25	5000
Dibromochloromethane	ND		5000	2500	ug/L			10/20/19 00:25	5000
Chloroethane	ND		5000	3800	ug/L			10/20/19 00:25	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			10/20/19 00:25	5000
Chloroform	ND		5000	3000	ug/L			10/20/19 00:25	5000
1-Chlorohexane	ND		5000	3500	ug/L			10/20/19 00:25	5000
Chloromethane	ND	*	5000	4200	ug/L			10/20/19 00:25	5000
cis-1,2-Dichloroethene	ND		5000	2500	ug/L			10/20/19 00:25	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			10/20/19 00:25	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			10/20/19 00:25	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			10/20/19 00:25	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			10/20/19 00:25	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,2-Dichloroethane	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			10/20/19 00:25	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			10/20/19 00:25	5000
Ethylbenzene	ND		5000	2500	ug/L			10/20/19 00:25	5000
Ethyl methacrylate	ND		5000	3000	ug/L			10/20/19 00:25	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			10/20/19 00:25	5000
2-Hexanone	ND		130000	16000	ug/L			10/20/19 00:25	5000
Isopropylbenzene	ND		5000	2700	ug/L			10/20/19 00:25	5000
Methylene bromide	ND		25000	3000	ug/L			10/20/19 00:25	5000
Methylene Chloride	ND		25000	15000	ug/L			10/20/19 00:25	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			10/20/19 00:25	5000
Methyl tert-butyl ether	ND		5000	3700	ug/L			10/20/19 00:25	5000
m-Xylene & p-Xylene	ND		25000	8000	ug/L			10/20/19 00:25	5000
Naphthalene	ND		5000	5000	ug/L			10/20/19 00:25	5000
n-Butylbenzene	ND		5000	3800	ug/L			10/20/19 00:25	5000
N-Propylbenzene	ND		5000	3500	ug/L			10/20/19 00:25	5000
o-Chlorotoluene	ND		5000	2900	ug/L			10/20/19 00:25	5000
o-Xylene	ND		25000	3000	ug/L			10/20/19 00:25	5000
p-Chlorotoluene	ND		5000	2800	ug/L			10/20/19 00:25	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			10/20/19 00:25	5000
sec-Butylbenzene	ND		5000	3500	ug/L			10/20/19 00:25	5000

Client Sample ID: MW7-ROX-100819
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5000	5000	ug/L			10/20/19 00:25	5000
tert-Butylbenzene	ND		5000	3200	ug/L			10/20/19 00:25	5000
1,1,1,2-Tetrachloroethane	ND		5000	2600	ug/L			10/20/19 00:25	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			10/20/19 00:25	5000
Tetrachloroethene	ND		5000	2900	ug/L			10/20/19 00:25	5000
Toluene	ND		5000	2100	ug/L			10/20/19 00:25	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			10/20/19 00:25	5000
trans-1,3-Dichloropropene	ND		25000	2500	ug/L			10/20/19 00:25	5000
1,2,3-Trichlorobenzene	ND		5000	3500	ug/L			10/20/19 00:25	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			10/20/19 00:25	5000
1,1,1-Trichloroethane	ND		5000	2500	ug/L			10/20/19 00:25	5000
1,1,2-Trichloroethane	ND		25000	2500	ug/L			10/20/19 00:25	5000
Trichloroethene	ND		5000	2500	ug/L			10/20/19 00:25	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			10/20/19 00:25	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			10/20/19 00:25	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			10/20/19 00:25	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			10/20/19 00:25	5000
Vinyl acetate	ND		130000	10000	ug/L			10/20/19 00:25	5000
Vinyl chloride	ND		5000	2500	ug/L			10/20/19 00:25	5000
Xylenes, Total	ND		50000	8000	ug/L			10/20/19 00:25	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/20/19 00:25*	*5000*
Dibromofluoromethane	*101*		*81 - 121*		*10/20/19 00:25*	*5000*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/20/19 00:25*	*5000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1700000		10000	3800	ug/L			10/21/19 20:49	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*10/21/19 20:49*	*10000*
Dibromofluoromethane	*106*		*81 - 121*		*10/21/19 20:49*	*10000*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/21/19 20:49*	*10000*

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		10/15/19 10:42	10/23/19 17:12	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/15/19 10:42	10/23/19 17:12	1
Anthracene	ND		0.19	0.019	ug/L		10/15/19 10:42	10/23/19 17:12	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Chrysene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1
Fluoranthene	ND		0.19	0.019	ug/L		10/15/19 10:42	10/23/19 17:12	1
Fluorene	ND		0.19	0.020	ug/L		10/15/19 10:42	10/23/19 17:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/15/19 10:42	10/23/19 17:12	1

Client Sample ID: MW7-ROX-100819
Date Collected: 10/08/19 13:40
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Lab Sample ID: 400-177718-6
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		10/15/19 10:42	10/23/19 17:12	1
Pyrene	ND		0.19	0.019	ug/L		10/15/19 10:42	10/23/19 17:12	1
1-Methylnaphthalene	1.7	J	0.19	0.019	ug/L		10/15/19 10:42	10/23/19 17:12	1
2-Methylnaphthalene	2.6	J	0.19	0.019	ug/L		10/15/19 10:42	10/23/19 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*52*		*33 - 138*	*10/15/19 10:42*	*10/23/19 17:12*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*10/15/19 10:42*	*10/23/19 17:12*	*1*
Nitrobenzene-d5	*81*		*19 - 130*	*10/15/19 10:42*	*10/23/19 17:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*	9.6	3.6	ug/L		10/15/19 10:42	10/25/19 20:06	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/15/19 10:42	10/25/19 20:06	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/15/19 10:42	10/25/19 20:06	1
Benzyl alcohol	ND		9.6	1.9	ug/L		10/15/19 10:42	10/25/19 20:06	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/15/19 10:42	10/25/19 20:06	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/15/19 10:42	10/25/19 20:06	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/15/19 10:42	10/25/19 20:06	1
Bis(2-ethylhexyl) phthalate	ND	*	9.6	4.8	ug/L		10/15/19 10:42	10/25/19 20:06	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/15/19 10:42	10/25/19 20:06	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/15/19 10:42	10/25/19 20:06	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/15/19 10:42	10/25/19 20:06	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/15/19 10:42	10/25/19 20:06	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/15/19 10:42	10/25/19 20:06	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/15/19 10:42	10/25/19 20:06	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/15/19 10:42	10/25/19 20:06	1
Dibenz[a,h]acridine	ND	*	9.6	2.9	ug/L		10/15/19 10:42	10/25/19 20:06	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/15/19 10:42	10/25/19 20:06	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/15/19 10:42	10/25/19 20:06	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,4-Dimethylphenol	4.5	J	9.6	3.4	ug/L		10/15/19 10:42	10/25/19 20:06	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/15/19 10:42	10/25/19 20:06	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/15/19 10:42	10/25/19 20:06	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/15/19 10:42	10/25/19 20:06	1
Di-n-octyl phthalate	ND	UJ	9.6	0.42	ug/L		10/15/19 10:42	10/25/19 20:06	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/15/19 10:42	10/25/19 20:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/15/19 10:42	10/25/19 20:06	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/15/19 10:42	10/25/19 20:06	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/15/19 10:42	10/25/19 20:06	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/15/19 10:42	10/25/19 20:06	1
Indene	2.2	J	9.6	0.96	ug/L		10/15/19 10:42	10/25/19 20:06	1
Isophorone	ND		9.6	0.55	ug/L		10/15/19 10:42	10/25/19 20:06	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/15/19 10:42	10/25/19 20:06	1
3 & 4 Methylphenol	2.4	J	19	1.0	ug/L		10/15/19 10:42	10/25/19 20:06	1

Client Sample ID: MW7-ROX-100819
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-6
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		10/15/19 10:42	10/25/19 20:06	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/15/19 10:42	10/25/19 20:06	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/15/19 10:42	10/25/19 20:06	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/15/19 10:42	10/25/19 20:06	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/15/19 10:42	10/25/19 20:06	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/15/19 10:42	10/25/19 20:06	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/15/19 10:42	10/25/19 20:06	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/15/19 10:42	10/25/19 20:06	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/15/19 10:42	10/25/19 20:06	1
Pentachlorophenol	ND		19	1.7	ug/L		10/15/19 10:42	10/25/19 20:06	1
Pyridine	ND		9.6	3.1	ug/L		10/15/19 10:42	10/25/19 20:06	1
Quinoline	ND		9.6	5.7	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/15/19 10:42	10/25/19 20:06	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/15/19 10:42	10/25/19 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*34 - 120*	*10/15/19 10:42*	*10/25/19 20:06*	*1*
2-Fluorophenol	*50*		*10 - 120*	*10/15/19 10:42*	*10/25/19 20:06*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*10/15/19 10:42*	*10/25/19 20:06*	*1*
Phenol-d5	*77*		*10 - 120*	*10/15/19 10:42*	*10/25/19 20:06*	*1*
Terphenyl-d14	*96*		*53 - 125*	*10/15/19 10:42*	*10/25/19 20:06*	*1*
2,4,6-Tribromophenol	*107*		*15 - 135*	*10/15/19 10:42*	*10/25/19 20:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	140		48	12	ug/L		10/15/19 10:42	10/28/19 20:02	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	0.0054	ug/L		10/10/19 14:05	10/10/19 19:39	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/10/19 14:05	10/10/19 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*10/10/19 14:05*	*10/10/19 19:39*	*1*

Client Sample ID: MW7-ROX-100819-DUP
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			10/20/19 00:49	5000
Acrolein	ND		100000	50000	ug/L			10/20/19 00:49	5000
Acrylonitrile	ND		50000	14000	ug/L			10/20/19 00:49	5000
Bromobenzene	ND		5000	2700	ug/L			10/20/19 00:49	5000
Bromochloromethane	ND		5000	2600	ug/L			10/20/19 00:49	5000
Bromodichloromethane	ND		5000	2500	ug/L			10/20/19 00:49	5000
Bromoform	ND		25000	3600	ug/L			10/20/19 00:49	5000
Bromomethane	ND		5000	4900	ug/L			10/20/19 00:49	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			10/20/19 00:49	5000
Carbon disulfide	ND		5000	2500	ug/L			10/20/19 00:49	5000
Carbon tetrachloride	ND		5000	2500	ug/L			10/20/19 00:49	5000
Chlorobenzene	ND		5000	2500	ug/L			10/20/19 00:49	5000
Dibromochloromethane	ND		5000	2500	ug/L			10/20/19 00:49	5000
Chloroethane	ND		5000	3800	ug/L			10/20/19 00:49	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			10/20/19 00:49	5000
Chloroform	ND		5000	3000	ug/L			10/20/19 00:49	5000
1-Chlorohexane	ND		5000	3500	ug/L			10/20/19 00:49	5000
Chloromethane	ND	*	5000	4200	ug/L			10/20/19 00:49	5000
cis-1,2-Dichloroethene	ND		5000	2500	ug/L			10/20/19 00:49	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			10/20/19 00:49	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			10/20/19 00:49	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			10/20/19 00:49	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			10/20/19 00:49	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,2-Dichloroethane	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			10/20/19 00:49	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			10/20/19 00:49	5000
Ethylbenzene	ND		5000	2500	ug/L			10/20/19 00:49	5000
Ethyl methacrylate	ND		5000	3000	ug/L			10/20/19 00:49	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			10/20/19 00:49	5000
2-Hexanone	ND		130000	16000	ug/L			10/20/19 00:49	5000
Isopropylbenzene	ND		5000	2700	ug/L			10/20/19 00:49	5000
Methylene bromide	ND		25000	3000	ug/L			10/20/19 00:49	5000
Methylene Chloride	ND		25000	15000	ug/L			10/20/19 00:49	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			10/20/19 00:49	5000
Methyl tert-butyl ether	ND		5000	3700	ug/L			10/20/19 00:49	5000
m-Xylene & p-Xylene	ND		25000	8000	ug/L			10/20/19 00:49	5000
Naphthalene	ND		5000	5000	ug/L			10/20/19 00:49	5000
n-Butylbenzene	ND		5000	3800	ug/L			10/20/19 00:49	5000
N-Propylbenzene	ND		5000	3500	ug/L			10/20/19 00:49	5000
o-Chlorotoluene	ND		5000	2900	ug/L			10/20/19 00:49	5000
o-Xylene	ND		25000	3000	ug/L			10/20/19 00:49	5000
p-Chlorotoluene	ND		5000	2800	ug/L			10/20/19 00:49	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			10/20/19 00:49	5000
sec-Butylbenzene	ND		5000	3500	ug/L			10/20/19 00:49	5000

Client Sample ID: MW7-ROX-100819-DUP
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5000	5000	ug/L			10/20/19 00:49	5000
tert-Butylbenzene	ND		5000	3200	ug/L			10/20/19 00:49	5000
1,1,1,2-Tetrachloroethane	ND		5000	2600	ug/L			10/20/19 00:49	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			10/20/19 00:49	5000
Tetrachloroethene	ND		5000	2900	ug/L			10/20/19 00:49	5000
Toluene	ND		5000	2100	ug/L			10/20/19 00:49	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			10/20/19 00:49	5000
trans-1,3-Dichloropropene	ND		25000	2500	ug/L			10/20/19 00:49	5000
1,2,3-Trichlorobenzene	ND		5000	3500	ug/L			10/20/19 00:49	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			10/20/19 00:49	5000
1,1,1-Trichloroethane	ND		5000	2500	ug/L			10/20/19 00:49	5000
1,1,2-Trichloroethane	ND		25000	2500	ug/L			10/20/19 00:49	5000
Trichloroethene	ND		5000	2500	ug/L			10/20/19 00:49	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			10/20/19 00:49	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			10/20/19 00:49	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			10/20/19 00:49	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			10/20/19 00:49	5000
Vinyl acetate	ND		130000	10000	ug/L			10/20/19 00:49	5000
Vinyl chloride	ND		5000	2500	ug/L			10/20/19 00:49	5000
Xylenes, Total	ND		50000	8000	ug/L			10/20/19 00:49	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/20/19 00:49*	*5000*
Dibromofluoromethane	*98*		*81 - 121*		*10/20/19 00:49*	*5000*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/20/19 00:49*	*5000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1600000		10000	3800	ug/L			10/21/19 21:11	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*10/21/19 21:11*	*10000*
Dibromofluoromethane	*104*		*81 - 121*		*10/21/19 21:11*	*10000*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/21/19 21:11*	*10000*

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		10/14/19 08:18	10/23/19 13:25	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:25	1
Anthracene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:25	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Chrysene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1
Fluoranthene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:25	1
Fluorene	ND		0.19	0.020	ug/L		10/14/19 08:18	10/23/19 13:25	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/14/19 08:18	10/23/19 13:25	1

Client Sample ID: MW7-ROX-100819-DUP
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-7
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		10/14/19 08:18	10/23/19 13:25	1
Pyrene	ND		0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:25	1
1-Methylnaphthalene	0.73	J	0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:25	1
2-Methylnaphthalene	1.2	J	0.19	0.019	ug/L		10/14/19 08:18	10/23/19 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*36*		*33 - 138*	*10/14/19 08:18*	*10/23/19 13:25*	*1*
2-Fluorobiphenyl	*48*		*15 - 122*	*10/14/19 08:18*	*10/23/19 13:25*	*1*
Nitrobenzene-d5	*48*		*19 - 130*	*10/14/19 08:18*	*10/23/19 13:25*	*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		10/14/19 08:18	10/25/19 21:24	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/14/19 08:18	10/25/19 21:24	1
Benzoic acid	9.3	J J	29	7.0	ug/L		10/14/19 08:18	10/25/19 21:24	1
Benzyl alcohol	ND		9.6	1.9	ug/L		10/14/19 08:18	10/25/19 21:24	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/14/19 08:18	10/25/19 21:24	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/14/19 08:18	10/25/19 21:24	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/14/19 08:18	10/25/19 21:24	1
Bis(2-ethylhexyl) phthalate	4.9	J J	9.6	4.8	ug/L		10/14/19 08:18	10/25/19 21:24	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/14/19 08:18	10/25/19 21:24	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/14/19 08:18	10/25/19 21:24	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/14/19 08:18	10/25/19 21:24	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/14/19 08:18	10/25/19 21:24	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/14/19 08:18	10/25/19 21:24	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/14/19 08:18	10/25/19 21:24	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/14/19 08:18	10/25/19 21:24	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/14/19 08:18	10/25/19 21:24	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/14/19 08:18	10/25/19 21:24	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/14/19 08:18	10/25/19 21:24	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/14/19 08:18	10/25/19 21:24	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		10/14/19 08:18	10/25/19 21:24	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/14/19 08:18	10/25/19 21:24	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/14/19 08:18	10/25/19 21:24	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/14/19 08:18	10/25/19 21:24	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/14/19 08:18	10/25/19 21:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/14/19 08:18	10/25/19 21:24	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/14/19 08:18	10/25/19 21:24	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/14/19 08:18	10/25/19 21:24	1
Hexachloroethane	ND	*	9.6	4.0	ug/L		10/14/19 08:18	10/25/19 21:24	1
Indene	ND		9.6	0.96	ug/L		10/14/19 08:18	10/25/19 21:24	1
Isophorone	ND		9.6	0.55	ug/L		10/14/19 08:18	10/25/19 21:24	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/14/19 08:18	10/25/19 21:24	1
3 & 4 Methylphenol	1.2	J	19	1.0	ug/L		10/14/19 08:18	10/25/19 21:24	1

Client Sample ID: MW7-ROX-100819-DUP
Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

Lab Sample ID: 400-177718-7
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		10/14/19 08:18	10/25/19 21:24	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/14/19 08:18	10/25/19 21:24	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/14/19 08:18	10/25/19 21:24	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/14/19 08:18	10/25/19 21:24	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/14/19 08:18	10/25/19 21:24	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/14/19 08:18	10/25/19 21:24	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/14/19 08:18	10/25/19 21:24	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/14/19 08:18	10/25/19 21:24	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/14/19 08:18	10/25/19 21:24	1
Pentachlorophenol	ND		19	1.7	ug/L		10/14/19 08:18	10/25/19 21:24	1
Pyridine	ND		9.6	3.1	ug/L		10/14/19 08:18	10/25/19 21:24	1
Quinoline	ND		9.6	5.8	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/14/19 08:18	10/25/19 21:24	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/14/19 08:18	10/25/19 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*34 - 120*	*10/14/19 08:18*	*10/25/19 21:24*	*1*
2-Fluorophenol	*17*		*10 - 120*	*10/14/19 08:18*	*10/25/19 21:24*	*1*
Nitrobenzene-d5	*44*		*27 - 120*	*10/14/19 08:18*	*10/25/19 21:24*	*1*
Phenol-d5	*38*		*10 - 120*	*10/14/19 08:18*	*10/25/19 21:24*	*1*
Terphenyl-d14	*44*	*X*	*53 - 125*	*10/14/19 08:18*	*10/25/19 21:24*	*1*
2,4,6-Tribromophenol	*54*		*15 - 135*	*10/14/19 08:18*	*10/25/19 21:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	70		48	12	ug/L		10/14/19 08:18	10/28/19 20:28	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/10/19 14:05	10/10/19 20:03	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/10/19 14:05	10/10/19 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*10/10/19 14:05*	*10/10/19 20:03*	*1*

Definitions/Glossary

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

Job ID: 400-177718-1

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
*	ISTD response or retention time outside acceptable limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

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: 400-177718-1

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)
400-177718-2	TB-ROX-100819-8260	91	105	86
400-177718-3	MW4-ROX-100819	92	104	85
400-177718-4	MW25-ROX-100819	95	102	87
400-177718-5	MW8-ROX-100819	89	101	84
400-177718-6	MW7-ROX-100819	92	101	86
400-177718-6 - DL	MW7-ROX-100819	109	106	99
400-177718-7	MW7-ROX-100819-DUP	92	98	86
400-177718-7 - DL	MW7-ROX-100819-DUP	108	104	99
LCS 400-462264/1002	Lab Control Sample	91	106	85
LCS 400-462385/1002	Lab Control Sample	102	106	96
MB 400-462264/4	Method Blank	93	106	87
MB 400-462385/4	Method Blank	100	108	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)
400-177718-3	MW4-ROX-100819	84	34	77	62	83	81
400-177718-4	MW25-ROX-100819	95	32	87	56	95	76
400-177718-5	MW8-ROX-100819	89	25	90	47	63	105
400-177718-6	MW7-ROX-100819	100	50	84	77	96	107
400-177718-7	MW7-ROX-100819-DUP	51	17	44	38	44 X	54
LCS 400-461393/2-A	Lab Control Sample	76	41	83	70	85	80
LCS 400-461393/4-A	Lab Control Sample	76	37	80	55	94	29
LCS 400-461509/29-A	Lab Control Sample	80	59	76	75	101	65
LCS 400-461509/2-A	Lab Control Sample	90	61	91	76	107	89
LCS 400-462605/2-A	Lab Control Sample	82	43	88	78	91	99
LCS 400-462605/6-A	Lab Control Sample	86	37	93	75	99	44
LCSD 400-461393/3-A	Lab Control Sample Dup	83	63	96	84	88	87
LCSD 400-461393/5-A	Lab Control Sample Dup	69	16	71	39	92	23
LCSD 400-461509/30-A	Lab Control Sample Dup	83	67	78	76	105	68
LCSD 400-461509/3-A	Lab Control Sample Dup	79	58	78	68	90	74
LCSD 400-462605/3-A	Lab Control Sample Dup	88	55	98	90	99	105
LCSD 400-462605/7-A	Lab Control Sample Dup	85	19	90	64	96	26
MB 400-461393/1-A	Method Blank	75	42	79	68	91	76
MB 400-461509/1-A	Method Blank	87	68	84	85	110	74
MB 400-462605/1-A	Method Blank	100	51	105	92	116	92

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14

Surrogate Summary

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

Job ID: 400-177718-1

TBP = 2,4,6-Tribromophenol

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (33-138)	FBP (15-122)	NBZ (19-130)
400-177718-3	MW4-ROX-100819	74	77	80
400-177718-4	MW25-ROX-100819	81	86	93
400-177718-5	MW8-ROX-100819	53	68	62
400-177718-6	MW7-ROX-100819	52	83	81
400-177718-7	MW7-ROX-100819-DUP	36	48	48
LCS 400-461393/2-A	Lab Control Sample	79	78	76
LCS 400-461509/2-A	Lab Control Sample	126	90	87
LCS 400-462605/2-A	Lab Control Sample	111	94	83
LCSD 400-461393/3-A	Lab Control Sample Dup	78	82	82
LCSD 400-461509/3-A	Lab Control Sample Dup	107	81	82
LCSD 400-462605/3-A	Lab Control Sample Dup	116	101	84
MB 400-461393/1-A	Method Blank	81	74	79
MB 400-461509/1-A	Method Blank	235 X	163 X *	159 X
MB 400-461509/1-A - RA	Method Blank	82	71	76
MB 400-462605/1-A	Method Blank	144 X	114	111

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)
400-177718-1	TB-ROX-100819-8011	102
400-177718-3	MW4-ROX-100819	80
400-177718-4	MW25-ROX-100819	79
400-177718-5	MW8-ROX-100819	85
400-177718-6	MW7-ROX-100819	77
400-177718-7	MW7-ROX-100819-DUP	77
LCS 400-460985/2-A	Lab Control Sample	97
LCSD 400-460985/3-A	Lab Control Sample Dup	94
MB 400-460985/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177718-1

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: 400-177718-1

Client Sample ID: TB-ROX-100819-8011

Lab Sample ID: 400-177718-1
Date Collected: 10/08/19 00:00
Matrix: Water
Date Received: 10/09/19 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.9 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 18:05	KLR	TAL PEN

Client Sample ID: TB-ROX-100819-8260

Lab Sample ID: 400-177718-2
Date Collected: 10/08/19 00:00
Matrix: Water
Date Received: 10/09/19 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462264	10/19/19 19:13	BSW	TAL PEN

Client Sample ID: MW4-ROX-100819

Lab Sample ID: 400-177718-3
Date Collected: 10/08/19 09:00
Matrix: Water
Date Received: 10/09/19 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462264	10/19/19 21:37	BSW	TAL PEN
Total/NA	Prep	3520C			1048.4 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 20:33	VC1	TAL PEN
Total/NA	Prep	3520C			1048.4 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 12:50	KJA	TAL PEN
Total/NA	Prep	8011			36.7 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 18:29	KLR	TAL PEN

Client Sample ID: MW25-ROX-100819

Lab Sample ID: 400-177718-4
Date Collected: 10/08/19 10:05
Matrix: Water
Date Received: 10/09/19 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462264	10/19/19 22:01	BSW	TAL PEN
Total/NA	Prep	3520C			1044.2 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 20:58	VC1	TAL PEN
Total/NA	Prep	3520C			1044.2 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 13:08	KJA	TAL PEN
Total/NA	Prep	8011			36.3 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 18:52	KLR	TAL PEN

Client Sample ID: MW8-ROX-100819

Lab Sample ID: 400-177718-5
Date Collected: 10/08/19 11:55
Matrix: Water
Date Received: 10/09/19 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	462264	10/20/19 00:01	BSW	TAL PEN
Total/NA	Prep	3520C			1051.4 mL	1 mL	462605	10/23/19 12:04	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 12:39	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177718-1

Client Sample ID: MW8-ROX-100819

Lab Sample ID: 400-177718-5

Date Collected: 10/08/19 11:55
Date Received: 10/09/19 08:55

Matrix: 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		1051.4 mL	1 mL	462605	10/23/19 12:04	HAD	TAL PEN
Total/NA	Analysis	8270D	DL	5			464353	11/03/19 12:34	VC1	TAL PEN
Total/NA	Prep	3520C			1051.4 mL	1 mL	462605	10/23/19 12:04	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 22:06	PP1	TAL PEN
Total/NA	Prep	8011			36.5 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 19:16	KLR	TAL PEN

Client Sample ID: MW7-ROX-100819

Lab Sample ID: 400-177718-6

Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

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	DL	10000	5 mL	5 mL	462385	10/21/19 20:49	CS	TAL PEN
Total/NA	Analysis	8260B		5000	5 mL	5 mL	462264	10/20/19 00:25	BSW	TAL PEN
Total/NA	Prep	3520C	DL		1043.8 mL	1 mL	461509	10/15/19 10:42	BNL	TAL PEN
Total/NA	Analysis	8270D	DL	5			463466	10/28/19 20:02	VC1	TAL PEN
Total/NA	Prep	3520C			1043.8 mL	1 mL	461509	10/15/19 10:42	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 20:06	VC1	TAL PEN
Total/NA	Prep	3520C			1043.8 mL	1 mL	461509	10/15/19 10:42	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 17:12	KJA	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 19:39	KLR	TAL PEN

Client Sample ID: MW7-ROX-100819-DUP

Lab Sample ID: 400-177718-7

Date Collected: 10/08/19 13:40
Date Received: 10/09/19 08:55

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	DL	10000	5 mL	5 mL	462385	10/21/19 21:11	CS	TAL PEN
Total/NA	Analysis	8260B		5000	5 mL	5 mL	462264	10/20/19 00:49	BSW	TAL PEN
Total/NA	Prep	3520C	DL		1043.2 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D	DL	5			463466	10/28/19 20:28	VC1	TAL PEN
Total/NA	Prep	3520C			1043.2 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 21:24	VC1	TAL PEN
Total/NA	Prep	3520C			1043.2 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 13:25	KJA	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 20:03	KLR	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-460985/1-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	460985	10/10/19 14:04	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 16:54	KLR	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-461393/1-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 17:22	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 07:52	KJA	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-461509/1-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	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 17:58	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1000 mL	1 mL	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			463641	10/30/19 02:01	PP1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			462486	10/22/19 00:06	PP1	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-462264/4**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462264	10/19/19 16:24	BSW	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-462385/4**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462385	10/21/19 14:37	CS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-462605/1-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 10:13	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177718-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462605/1-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464437	11/04/19 21:03	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-460985/2-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	460985	10/10/19 14:04	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 17:18	KLR	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-461393/2-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 17:47	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 08:09	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-461393/4-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462843	10/23/19 20:44	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-461509/29-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	461509	10/15/19 10:42	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 19:15	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-461509/2-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	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 18:23	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			462486	10/22/19 00:22	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-177718-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462264/1002
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	462264	10/19/19 15:24	BSW	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462385/1002
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	462385	10/21/19 13:36	CS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462605/2-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	464293	11/02/19 10:33	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			464437	11/04/19 21:19	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462605/6-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 11:57	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-460985/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	460985	10/10/19 14:05	KLR	TAL PEN
Total/NA	Analysis	8011		1			461023	10/10/19 17:41	KLR	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-461393/3-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1			462843	10/23/19 18:12	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 08:27	KJA	TAL PEN

Lab Chronicle

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

Job ID: 400-177718-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-461393/5-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	461393	10/14/19 08:18	LGF	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462843	10/23/19 21:09	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-461509/30-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	461509	10/15/19 19:08	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 19:41	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-461509/3-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 mL	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 18:49	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461509	10/14/19 17:42	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			462486	10/22/19 00:38	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462605/3-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 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 10:54	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			464437	11/04/19 21:35	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462605/7-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 12:18	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: 400-177718-1

GC/MS VOA

Analysis Batch: 462264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-2	TB-ROX-100819-8260	Total/NA	Water	8260B	
400-177718-3	MW4-ROX-100819	Total/NA	Water	8260B	
400-177718-4	MW25-ROX-100819	Total/NA	Water	8260B	
400-177718-5	MW8-ROX-100819	Total/NA	Water	8260B	
400-177718-6	MW7-ROX-100819	Total/NA	Water	8260B	
400-177718-7	MW7-ROX-100819-DUP	Total/NA	Water	8260B	
MB 400-462264/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462264/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 462385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-6 - DL	MW7-ROX-100819	Total/NA	Water	8260B	
400-177718-7 - DL	MW7-ROX-100819-DUP	Total/NA	Water	8260B	
MB 400-462385/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462385/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 461393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-3	MW4-ROX-100819	Total/NA	Water	3520C	
400-177718-4	MW25-ROX-100819	Total/NA	Water	3520C	
400-177718-7	MW7-ROX-100819-DUP	Total/NA	Water	3520C	
400-177718-7 - DL	MW7-ROX-100819-DUP	Total/NA	Water	3520C	
MB 400-461393/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-461393/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-461393/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-461393/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-461393/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 461509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-6	MW7-ROX-100819	Total/NA	Water	3520C	
400-177718-6 - DL	MW7-ROX-100819	Total/NA	Water	3520C	
MB 400-461509/1-A - RA	Method Blank	Total/NA	Water	3520C	
MB 400-461509/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-461509/29-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-461509/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-461509/30-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-461509/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461509/1-A	Method Blank	Total/NA	Water	8270D LL	461509
LCS 400-461509/2-A	Lab Control Sample	Total/NA	Water	8270D LL	461509
LCSD 400-461509/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	461509

Prep Batch: 462605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-5	MW8-ROX-100819	Total/NA	Water	3520C	
400-177718-5 - DL	MW8-ROX-100819	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 462605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462605/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462605/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462605/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462605/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462605/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-3	MW4-ROX-100819	Total/NA	Water	8270D LL	461393
400-177718-4	MW25-ROX-100819	Total/NA	Water	8270D LL	461393
400-177718-6	MW7-ROX-100819	Total/NA	Water	8270D LL	461509
400-177718-7	MW7-ROX-100819-DUP	Total/NA	Water	8270D LL	461393
MB 400-461393/1-A	Method Blank	Total/NA	Water	8270D LL	461393
LCS 400-461393/2-A	Lab Control Sample	Total/NA	Water	8270D LL	461393
LCSD 400-461393/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	461393

Analysis Batch: 462843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461393/1-A	Method Blank	Total/NA	Water	8270D	461393
LCS 400-461393/2-A	Lab Control Sample	Total/NA	Water	8270D	461393
LCS 400-461393/4-A	Lab Control Sample	Total/NA	Water	8270D	461393
LCSD 400-461393/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	461393
LCSD 400-461393/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	461393

Analysis Batch: 463207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-3	MW4-ROX-100819	Total/NA	Water	8270D	461393
400-177718-4	MW25-ROX-100819	Total/NA	Water	8270D	461393
400-177718-6	MW7-ROX-100819	Total/NA	Water	8270D	461509
400-177718-7	MW7-ROX-100819-DUP	Total/NA	Water	8270D	461393
MB 400-461509/1-A	Method Blank	Total/NA	Water	8270D	461509
LCS 400-461509/29-A	Lab Control Sample	Total/NA	Water	8270D	461509
LCS 400-461509/2-A	Lab Control Sample	Total/NA	Water	8270D	461509
LCSD 400-461509/30-A	Lab Control Sample Dup	Total/NA	Water	8270D	461509
LCSD 400-461509/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	461509

Analysis Batch: 463466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-6 - DL	MW7-ROX-100819	Total/NA	Water	8270D	461509
400-177718-7 - DL	MW7-ROX-100819-DUP	Total/NA	Water	8270D	461393

Analysis Batch: 463641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461509/1-A - RA	Method Blank	Total/NA	Water	8270D LL	461509

Analysis Batch: 464199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-5	MW8-ROX-100819	Total/NA	Water	8270D LL	462605

QC Association Summary

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

Job ID: 400-177718-1

GC/MS Semi VOA

Analysis Batch: 464293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-5	MW8-ROX-100819	Total/NA	Water	8270D	462605
MB 400-462605/1-A	Method Blank	Total/NA	Water	8270D	462605
LCS 400-462605/2-A	Lab Control Sample	Total/NA	Water	8270D	462605
LCS 400-462605/6-A	Lab Control Sample	Total/NA	Water	8270D	462605
LCSD 400-462605/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462605
LCSD 400-462605/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	462605

Analysis Batch: 464353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-5 - DL	MW8-ROX-100819	Total/NA	Water	8270D	462605

Analysis Batch: 464437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462605/1-A	Method Blank	Total/NA	Water	8270D LL	462605
LCS 400-462605/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462605
LCSD 400-462605/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462605

GC Semi VOA

Prep Batch: 460985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-1	TB-ROX-100819-8011	Total/NA	Water	8011	
400-177718-3	MW4-ROX-100819	Total/NA	Water	8011	
400-177718-4	MW25-ROX-100819	Total/NA	Water	8011	
400-177718-5	MW8-ROX-100819	Total/NA	Water	8011	
400-177718-6	MW7-ROX-100819	Total/NA	Water	8011	
400-177718-7	MW7-ROX-100819-DUP	Total/NA	Water	8011	
MB 400-460985/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-460985/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-460985/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 461023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177718-1	TB-ROX-100819-8011	Total/NA	Water	8011	460985
400-177718-3	MW4-ROX-100819	Total/NA	Water	8011	460985
400-177718-4	MW25-ROX-100819	Total/NA	Water	8011	460985
400-177718-5	MW8-ROX-100819	Total/NA	Water	8011	460985
400-177718-6	MW7-ROX-100819	Total/NA	Water	8011	460985
400-177718-7	MW7-ROX-100819-DUP	Total/NA	Water	8011	460985
MB 400-460985/1-A	Method Blank	Total/NA	Water	8011	460985
LCS 400-460985/2-A	Lab Control Sample	Total/NA	Water	8011	460985
LCSD 400-460985/3-A	Lab Control Sample Dup	Total/NA	Water	8011	460985

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

Lab Sample ID: MB 400-462264/4
Matrix: Water
Analysis Batch: 462264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/19/19 16:24	1
Acrolein	ND		20	10	ug/L			10/19/19 16:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 16:24	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 16:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 16:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 16:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 16:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 16:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 16:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 16:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 16:24	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 16:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 16:24	1
Chloromethane	ND		1.0	0.83	ug/L			10/19/19 16:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 16:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 16:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 16:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 16:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 16:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 16:24	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 16:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 16:24	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 16:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 16:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 16:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 16:24	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 16:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 16:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 16:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 16:24	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 16:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 16:24	1

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

Lab Sample ID: MB 400-462264/4
Matrix: Water
Analysis Batch: 462264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 16:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/19/19 16:24	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 16:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 16:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 16:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 16:24	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 16:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 16:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 16:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 16:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 16:24	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 16:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 16:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 16:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 16:24	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 16:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 16:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/19/19 16:24*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/19/19 16:24*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/19/19 16:24*	*1*

Lab Sample ID: LCS 400-462264/1002
Matrix: Water
Analysis Batch: 462264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	229		ug/L		114	43 - 160
Acrolein	500	661		ug/L		132	38 - 160
Acrylonitrile	500	626		ug/L		125	64 - 142
Benzene	50.0	53.0		ug/L		106	70 - 130
Bromobenzene	50.0	40.9		ug/L		82	70 - 132
Bromochloromethane	50.0	52.5		ug/L		105	70 - 130
Bromodichloromethane	50.0	51.3		ug/L		103	67 - 133
Bromoform	50.0	41.6		ug/L		83	57 - 140
Bromomethane	50.0	70.2		ug/L		140	10 - 160
2-Butanone (MEK)	200	216		ug/L		108	61 - 145
Carbon disulfide	50.0	52.4		ug/L		105	61 - 137
Carbon tetrachloride	50.0	50.2		ug/L		100	61 - 137
Chlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dibromochloromethane	50.0	44.6		ug/L		89	67 - 135
Chloroethane	50.0	59.8		ug/L		120	55 - 141

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

Lab Sample ID: LCS 400-462264/1002
Matrix: Water
Analysis Batch: 462264

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	20.0		ug/L		40	10 - 160
Chloroform	50.0	53.6		ug/L		107	69 - 130
1-Chlorohexane	50.0	61.4		ug/L		123	69 - 130
Chloromethane	50.0	72.5	*	ug/L		145	58 - 137
cis-1,2-Dichloroethene	50.0	57.6		ug/L		115	68 - 130
cis-1,3-Dichloropropene	50.0	51.3		ug/L		103	69 - 132
1,2-Dichlorobenzene	50.0	41.5		ug/L		83	67 - 130
1,3-Dichlorobenzene	50.0	41.6		ug/L		83	70 - 130
1,4-Dichlorobenzene	50.0	41.0		ug/L		82	70 - 130
Dichlorodifluoromethane	50.0	52.5		ug/L		105	41 - 146
1,1-Dichloroethane	50.0	58.0		ug/L		116	70 - 130
1,2-Dichloroethane	50.0	59.5		ug/L		119	69 - 130
1,1-Dichloroethene	50.0	41.9		ug/L		84	63 - 134
1,2-Dichloropropane	50.0	59.3		ug/L		119	70 - 130
1,3-Dichloropropane	50.0	48.3		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	48.7		ug/L		97	52 - 135
1,1-Dichloropropene	50.0	53.8		ug/L		108	70 - 130
Ethylbenzene	50.0	46.3		ug/L		93	70 - 130
Ethyl methacrylate	50.0	45.5		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	48.3		ug/L		97	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	46.2		ug/L		92	70 - 130
Methylene bromide	50.0	49.7		ug/L		99	70 - 130
Methylene Chloride	50.0	52.0		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	241		ug/L		121	69 - 138
Methyl tert-butyl ether	50.0	52.5		ug/L		105	66 - 130
m-Xylene & p-Xylene	50.0	46.2		ug/L		92	70 - 130
Naphthalene	50.0	40.4		ug/L		81	47 - 149
n-Butylbenzene	50.0	42.5		ug/L		85	67 - 130
N-Propylbenzene	50.0	38.6		ug/L		77	70 - 130
o-Chlorotoluene	50.0	40.5		ug/L		81	70 - 130
o-Xylene	50.0	45.9		ug/L		92	70 - 130
p-Chlorotoluene	50.0	41.1		ug/L		82	70 - 130
p-Isopropyltoluene	50.0	42.2		ug/L		84	65 - 130
sec-Butylbenzene	50.0	40.2		ug/L		80	66 - 130
Styrene	50.0	42.0		ug/L		84	70 - 130
tert-Butylbenzene	50.0	39.9		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.5		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	39.8		ug/L		80	70 - 131
Tetrachloroethene	50.0	47.6		ug/L		95	65 - 130
Toluene	50.0	43.5		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	52.3		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	44.3		ug/L		89	63 - 130
1,2,3-Trichlorobenzene	50.0	47.9		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	48.5		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	52.5		ug/L		105	68 - 130
1,1,2-Trichloroethane	50.0	45.0		ug/L		90	70 - 130
Trichloroethene	50.0	53.6		ug/L		107	70 - 130
Trichlorofluoromethane	50.0	43.2		ug/L		86	65 - 138

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

Lab Sample ID: LCS 400-462264/1002
Matrix: Water
Analysis Batch: 462264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	38.4		ug/L		77	70 - 130
1,2,4-Trimethylbenzene	50.0	39.3		ug/L		79	70 - 130
1,3,5-Trimethylbenzene	50.0	38.9		ug/L		78	69 - 130
Vinyl acetate	100	118		ug/L		118	26 - 160
Vinyl chloride	50.0	55.8		ug/L		112	59 - 136
Xylenes, Total	100	92.1		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*85*		*80 - 120*

Lab Sample ID: MB 400-462385/4
Matrix: Water
Analysis Batch: 462385

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			10/21/19 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*10/21/19 14:37*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*10/21/19 14:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/21/19 14:37*	*1*

Lab Sample ID: LCS 400-462385/1002
Matrix: Water
Analysis Batch: 462385

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	49.5		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
Benzenethiol	ND		10	1.7	ug/L		10/14/19 08:18	10/23/19 17:22	1
Benzoic acid	ND		30	7.3	ug/L		10/14/19 08:18	10/23/19 17:22	1
Benzyl alcohol	ND		10	2.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/14/19 08:18	10/23/19 17:22	1

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/14/19 08:18	10/23/19 17:22	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/14/19 08:18	10/23/19 17:22	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/14/19 08:18	10/23/19 17:22	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Chloroaniline	ND		10	3.4	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Chlorophenol	ND		10	2.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Dibenzofuran	ND		10	0.52	ug/L		10/14/19 08:18	10/23/19 17:22	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Diethyl phthalate	ND		10	0.70	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/14/19 08:18	10/23/19 17:22	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/14/19 08:18	10/23/19 17:22	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/14/19 08:18	10/23/19 17:22	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/14/19 08:18	10/23/19 17:22	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/14/19 08:18	10/23/19 17:22	1
1,4-Dioxane	ND		10	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/14/19 08:18	10/23/19 17:22	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/14/19 08:18	10/23/19 17:22	1
Hexachloroethane	ND		10	4.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
Indene	ND		10	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
Isophorone	ND		10	0.57	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Methylphenol	ND		10	1.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Nitroaniline	ND		10	2.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
3-Nitroaniline	ND		10	1.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Nitroaniline	ND		10	2.5	ug/L		10/14/19 08:18	10/23/19 17:22	1
Nitrobenzene	ND		10	0.55	ug/L		10/14/19 08:18	10/23/19 17:22	1
2-Nitrophenol	ND		10	0.65	ug/L		10/14/19 08:18	10/23/19 17:22	1
4-Nitrophenol	ND		10	2.1	ug/L		10/14/19 08:18	10/23/19 17:22	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/14/19 08:18	10/23/19 17:22	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/14/19 08:18	10/23/19 17:22	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/14/19 08:18	10/23/19 17:22	1
Pentachlorophenol	ND		20	1.8	ug/L		10/14/19 08:18	10/23/19 17:22	1
Phenol	ND		10	2.6	ug/L		10/14/19 08:18	10/23/19 17:22	1
Pyridine	ND		10	3.2	ug/L		10/14/19 08:18	10/23/19 17:22	1
Quinoline	ND		10	6.0	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/14/19 08:18	10/23/19 17:22	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/14/19 08:18	10/23/19 17:22	1

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	75		34 - 120	10/14/19 08:18	10/23/19 17:22	1
2-Fluorophenol	42		10 - 120	10/14/19 08:18	10/23/19 17:22	1
Nitrobenzene-d5	79		27 - 120	10/14/19 08:18	10/23/19 17:22	1
Phenol-d5	68		10 - 120	10/14/19 08:18	10/23/19 17:22	1
Terphenyl-d14	91		53 - 125	10/14/19 08:18	10/23/19 17:22	1
2,4,6-Tribromophenol	76		15 - 135	10/14/19 08:18	10/23/19 17:22	1

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	23.4		ug/L		78	29 - 120
Benzoic acid	117	78.5		ug/L		67	10 - 150
Benzyl alcohol	30.0	22.7		ug/L		76	19 - 125
Bis(2-chloroethoxy)methane	30.0	22.9		ug/L		76	45 - 120
Bis(2-chloroethyl)ether	30.0	23.1		ug/L		77	48 - 120
bis (2-chloroisopropyl) ether	30.0	27.9		ug/L		93	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.3		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	22.2		ug/L		74	55 - 122
Butyl benzyl phthalate	30.0	25.3		ug/L		84	46 - 145
4-Chloroaniline	30.0	20.3		ug/L		68	30 - 120
4-Chloro-3-methylphenol	30.0	24.9		ug/L		83	39 - 140
2-Chloronaphthalene	30.0	21.8		ug/L		73	52 - 120
2-Chlorophenol	30.0	18.8		ug/L		63	34 - 120
4-Chlorophenyl phenyl ether	30.0	22.9		ug/L		76	58 - 124
Dibenz[a,h]acridine	30.0	22.5		ug/L		75	46 - 149
Dibenzofuran	30.0	24.1		ug/L		80	58 - 123
3,3'-Dichlorobenzidine	40.0	37.2		ug/L		93	39 - 135
2,4-Dichlorophenol	30.0	21.5		ug/L		72	39 - 128
Diethyl phthalate	30.0	26.7		ug/L		89	44 - 146
2,4-Dimethylphenol	30.0	25.2		ug/L		84	44 - 120
Dimethyl phthalate	30.0	23.4		ug/L		78	50 - 131
Di-n-butyl phthalate	30.0	27.0		ug/L		90	55 - 131
4,6-Dinitro-ortho-cresol	60.0	51.5		ug/L		86	10 - 150
2,4-Dinitrophenol	60.0	58.2		ug/L		97	10 - 150
2,4-Dinitrotoluene	30.0	26.2		ug/L		87	58 - 140
2,6-Dinitrotoluene	30.0	24.0		ug/L		80	57 - 130
Di-n-octyl phthalate	30.0	26.3		ug/L		88	50 - 150
1,4-Dioxane	30.0	17.5		ug/L		58	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	27.3		ug/L		91	47 - 123
Hexachlorobenzene	30.0	23.1		ug/L		77	52 - 131
Hexachlorocyclopentadiene	30.0	4.16	J	ug/L		14	10 - 129
Hexachloroethane	30.0	13.1		ug/L		44	41 - 120
Indene	30.0	22.5		ug/L		75	47 - 120
Isophorone	30.0	23.3		ug/L		78	49 - 120
2-Methylphenol	30.0	26.1		ug/L		87	39 - 123
3 & 4 Methylphenol	30.0	23.8		ug/L		79	38 - 121

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

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	30.0	27.1		ug/L		90	47 - 150
3-Nitroaniline	30.0	29.3		ug/L		98	34 - 132
4-Nitroaniline	30.0	35.3		ug/L		118	41 - 135
Nitrobenzene	30.0	22.7		ug/L		76	47 - 120
2-Nitrophenol	30.0	24.2		ug/L		81	28 - 136
4-Nitrophenol	60.0	61.2		ug/L		102	10 - 150
N-Nitrosodimethylamine	30.0	27.6		ug/L		92	22 - 148
N-Nitrosodi-n-propylamine	30.0	26.4		ug/L		88	44 - 120
N-Nitrosodiphenylamine	29.8	23.2		ug/L		78	56 - 120
Pentachlorophenol	60.0	43.4		ug/L		72	15 - 141
Phenol	30.0	19.6		ug/L		65	33 - 120
Pyridine	60.0	41.1		ug/L		68	26 - 120
Quinoline	30.0	27.0		ug/L		90	51 - 129
2,4,5-Trichlorophenol	30.0	24.3		ug/L		81	38 - 147
2,4,6-Trichlorophenol	30.0	22.6		ug/L		75	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*41*		*10 - 120*
Nitrobenzene-d5	*83*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*
2,4,6-Tribromophenol	*80*		*15 - 135*

Lab Sample ID: LCS 400-461393/4-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*80*		*27 - 120*
Phenol-d5	*55*		*10 - 120*
Terphenyl-d14	*94*		*53 - 125*
2,4,6-Tribromophenol	*29*		*15 - 135*

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	25.9		ug/L		86	29 - 120	10	30
Benzoic acid	117	90.9		ug/L		78	10 - 150	15	30
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125	9	30
Bis(2-chloroethoxy)methane	30.0	26.2		ug/L		87	45 - 120	13	30

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

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	30.0	24.2		ug/L		81	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	30.1		ug/L		100	30 - 125	8	30
Bis(2-ethylhexyl) phthalate	30.0	27.0		ug/L		90	48 - 150	3	30
4-Bromophenyl phenyl ether	30.0	22.1		ug/L		74	55 - 122	0	30
Butyl benzyl phthalate	30.0	25.4		ug/L		85	46 - 145	0	30
4-Chloroaniline	30.0	22.8		ug/L		76	30 - 120	12	30
4-Chloro-3-methylphenol	30.0	28.3		ug/L		94	39 - 140	13	30
2-Chloronaphthalene	30.0	24.3		ug/L		81	52 - 120	11	30
2-Chlorophenol	30.0	23.8		ug/L		79	34 - 120	24	30
4-Chlorophenyl phenyl ether	30.0	22.5		ug/L		75	58 - 124	2	30
Dibenz[a,h]acridine	30.0	19.0		ug/L		63	46 - 149	16	30
Dibenzofuran	30.0	24.9		ug/L		83	58 - 123	3	30
3,3'-Dichlorobenzidine	40.0	39.0		ug/L		98	39 - 135	5	30
2,4-Dichlorophenol	30.0	26.7		ug/L		89	39 - 128	21	30
Diethyl phthalate	30.0	28.0		ug/L		93	44 - 146	5	30
2,4-Dimethylphenol	30.0	29.1		ug/L		97	44 - 120	14	30
Dimethyl phthalate	30.0	25.1		ug/L		84	50 - 131	7	30
Di-n-butyl phthalate	30.0	25.9		ug/L		86	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	56.9		ug/L		95	10 - 150	10	30
2,4-Dinitrophenol	60.0	67.6		ug/L		113	10 - 150	15	30
2,4-Dinitrotoluene	30.0	28.1		ug/L		94	58 - 140	7	30
2,6-Dinitrotoluene	30.0	26.8		ug/L		89	57 - 130	11	30
Di-n-octyl phthalate	30.0	26.3		ug/L		88	50 - 150	0	30
1,4-Dioxane	30.0	19.2		ug/L		64	25 - 120	9	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	28.3		ug/L		94	47 - 123	4	30
Hexachlorobenzene	30.0	22.6		ug/L		75	52 - 131	2	30
Hexachlorocyclopentadiene	30.0	5.89	J *	ug/L		20	10 - 129	34	30
Hexachloroethane	30.0	21.2	*	ug/L		71	41 - 120	48	30
Indene	30.0	25.5		ug/L		85	47 - 120	13	30
Isophorone	30.0	26.0		ug/L		87	49 - 120	11	30
2-Methylphenol	30.0	29.7		ug/L		99	39 - 123	13	30
3 & 4 Methylphenol	30.0	26.8		ug/L		89	38 - 121	12	30
2-Nitroaniline	30.0	30.6		ug/L		102	47 - 150	12	30
3-Nitroaniline	30.0	31.2		ug/L		104	34 - 132	6	30
4-Nitroaniline	30.0	37.7		ug/L		126	41 - 135	7	30
Nitrobenzene	30.0	24.7		ug/L		82	47 - 120	9	30
2-Nitrophenol	30.0	30.4		ug/L		101	28 - 136	23	30
4-Nitrophenol	60.0	66.8		ug/L		111	10 - 150	9	30
N-Nitrosodimethylamine	30.0	31.3		ug/L		104	22 - 148	12	30
N-Nitrosodi-n-propylamine	30.0	28.4		ug/L		95	44 - 120	7	30
N-Nitrosodiphenylamine	29.8	24.5		ug/L		82	56 - 120	5	30
Pentachlorophenol	60.0	47.8		ug/L		80	15 - 141	10	30
Phenol	30.0	23.8		ug/L		79	33 - 120	19	30
Pyridine	60.0	46.1		ug/L		77	26 - 120	11	30
Quinoline	30.0	29.3		ug/L		98	51 - 129	8	30
2,4,5-Trichlorophenol	30.0	27.0		ug/L		90	38 - 147	11	30
2,4,6-Trichlorophenol	30.0	26.2		ug/L		87	36 - 139	15	30

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

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	83		34 - 120
2-Fluorophenol	63		10 - 120
Nitrobenzene-d5	96		27 - 120
Phenol-d5	84		10 - 120
Terphenyl-d14	88		53 - 125
2,4,6-Tribromophenol	87		15 - 135

Lab Sample ID: LCSD 400-461393/5-A
Matrix: Water
Analysis Batch: 462843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		1	10 - 120	49	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	69		34 - 120
2-Fluorophenol	16		10 - 120
Nitrobenzene-d5	71		27 - 120
Phenol-d5	39		10 - 120
Terphenyl-d14	92		53 - 125
2,4,6-Tribromophenol	23		15 - 135

Lab Sample ID: MB 400-461509/1-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/14/19 17:42	10/25/19 17:58	1
Benzenethiol	ND		10	1.7	ug/L		10/14/19 17:42	10/25/19 17:58	1
Benzoic acid	ND		30	7.3	ug/L		10/14/19 17:42	10/25/19 17:58	1
Benzyl alcohol	ND		10	2.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/14/19 17:42	10/25/19 17:58	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/14/19 17:42	10/25/19 17:58	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/14/19 17:42	10/25/19 17:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/14/19 17:42	10/25/19 17:58	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/14/19 17:42	10/25/19 17:58	1
4-Chloroaniline	ND		10	3.4	ug/L		10/14/19 17:42	10/25/19 17:58	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/14/19 17:42	10/25/19 17:58	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/14/19 17:42	10/25/19 17:58	1
2-Chlorophenol	ND		10	2.2	ug/L		10/14/19 17:42	10/25/19 17:58	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
Dibenzofuran	ND		10	0.52	ug/L		10/14/19 17:42	10/25/19 17:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
Diethyl phthalate	ND		10	0.70	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/14/19 17:42	10/25/19 17:58	1

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

Lab Sample ID: MB 400-461509/1-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	0.60	ug/L		10/14/19 17:42	10/25/19 17:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/14/19 17:42	10/25/19 17:58	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/14/19 17:42	10/25/19 17:58	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/14/19 17:42	10/25/19 17:58	1
1,4-Dioxane	ND		10	1.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/14/19 17:42	10/25/19 17:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/14/19 17:42	10/25/19 17:58	1
Hexachloroethane	ND		10	4.2	ug/L		10/14/19 17:42	10/25/19 17:58	1
Indene	ND		10	1.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
Isophorone	ND		10	0.57	ug/L		10/14/19 17:42	10/25/19 17:58	1
2-Methylphenol	ND		10	1.8	ug/L		10/14/19 17:42	10/25/19 17:58	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
2-Nitroaniline	ND		10	2.2	ug/L		10/14/19 17:42	10/25/19 17:58	1
3-Nitroaniline	ND		10	1.8	ug/L		10/14/19 17:42	10/25/19 17:58	1
4-Nitroaniline	ND		10	2.5	ug/L		10/14/19 17:42	10/25/19 17:58	1
Nitrobenzene	ND		10	0.55	ug/L		10/14/19 17:42	10/25/19 17:58	1
2-Nitrophenol	ND		10	0.65	ug/L		10/14/19 17:42	10/25/19 17:58	1
4-Nitrophenol	ND		10	2.1	ug/L		10/14/19 17:42	10/25/19 17:58	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/14/19 17:42	10/25/19 17:58	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/14/19 17:42	10/25/19 17:58	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/14/19 17:42	10/25/19 17:58	1
Pentachlorophenol	ND		20	1.8	ug/L		10/14/19 17:42	10/25/19 17:58	1
Phenol	ND		10	2.6	ug/L		10/14/19 17:42	10/25/19 17:58	1
Pyridine	ND		10	3.2	ug/L		10/14/19 17:42	10/25/19 17:58	1
Quinoline	ND		10	6.0	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/14/19 17:42	10/25/19 17:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/14/19 17:42	10/25/19 17:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*34 - 120*	*10/14/19 17:42*	*10/25/19 17:58*	*1*
2-Fluorophenol	*68*		*10 - 120*	*10/14/19 17:42*	*10/25/19 17:58*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*10/14/19 17:42*	*10/25/19 17:58*	*1*
Phenol-d5	*85*		*10 - 120*	*10/14/19 17:42*	*10/25/19 17:58*	*1*
Terphenyl-d14	*110*		*53 - 125*	*10/14/19 17:42*	*10/25/19 17:58*	*1*
2,4,6-Tribromophenol	*74*		*15 - 135*	*10/14/19 17:42*	*10/25/19 17:58*	*1*

Lab Sample ID: LCS 400-461509/29-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

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

Lab Sample ID: LCS 400-461509/29-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461509

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	80		34 - 120
2-Fluorophenol	59		10 - 120
Nitrobenzene-d5	76		27 - 120
Phenol-d5	75		10 - 120
Terphenyl-d14	101		53 - 125
2,4,6-Tribromophenol	65		15 - 135

Lab Sample ID: LCS 400-461509/2-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	29.1		ug/L		97	29 - 120
Benzoic acid	117	62.3		ug/L		53	10 - 150
Benzyl alcohol	30.0	22.8		ug/L		76	19 - 125
Bis(2-chloroethoxy)methane	30.0	26.3		ug/L		88	45 - 120
Bis(2-chloroethyl)ether	30.0	25.3		ug/L		84	48 - 120
bis (2-chloroisopropyl) ether	30.0	26.9		ug/L		90	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	44.7		ug/L		149	48 - 150
4-Bromophenyl phenyl ether	30.0	27.1		ug/L		90	55 - 122
Butyl benzyl phthalate	30.0	33.1		ug/L		110	46 - 145
4-Chloroaniline	30.0	24.9		ug/L		83	30 - 120
4-Chloro-3-methylphenol	30.0	27.6		ug/L		92	39 - 140
2-Chloronaphthalene	30.0	25.6		ug/L		85	52 - 120
2-Chlorophenol	30.0	25.7		ug/L		86	34 - 120
4-Chlorophenyl phenyl ether	30.0	26.9		ug/L		90	58 - 124
Dibenz[a,h]acridine	30.0	24.3		ug/L		81	46 - 149
Dibenzofuran	30.0	28.4		ug/L		95	58 - 123
3,3'-Dichlorobenzidine	40.0	41.8		ug/L		104	39 - 135
2,4-Dichlorophenol	30.0	26.3		ug/L		88	39 - 128
Diethyl phthalate	30.0	31.8		ug/L		106	44 - 146
2,4-Dimethylphenol	30.0	27.5		ug/L		92	44 - 120
Dimethyl phthalate	30.0	28.8		ug/L		96	50 - 131
Di-n-butyl phthalate	30.0	32.7		ug/L		109	55 - 131
4,6-Dinitro-ortho-cresol	60.0	58.6		ug/L		98	10 - 150
2,4-Dinitrophenol	60.0	55.7		ug/L		93	10 - 150
2,4-Dinitrotoluene	30.0	30.7		ug/L		102	58 - 140
2,6-Dinitrotoluene	30.0	29.3		ug/L		98	57 - 130
Di-n-octyl phthalate	30.0	30.6		ug/L		102	50 - 150
1,4-Dioxane	30.0	18.9		ug/L		63	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	30.3		ug/L		101	47 - 123
Hexachlorobenzene	30.0	27.7		ug/L		92	52 - 131
Hexachlorocyclopentadiene	30.0	ND	*	ug/L		5	10 - 129
Hexachloroethane	30.0	19.4		ug/L		65	41 - 120
Indene	30.0	25.9		ug/L		86	47 - 120
Isophorone	30.0	26.3		ug/L		88	49 - 120
2-Methylphenol	30.0	32.1		ug/L		107	39 - 123
3 & 4 Methylphenol	30.0	27.1		ug/L		90	38 - 121

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

Lab Sample ID: LCS 400-461509/2-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	30.0	30.7		ug/L		102	47 - 150
3-Nitroaniline	30.0	28.4		ug/L		95	34 - 132
4-Nitroaniline	30.0	32.2		ug/L		107	41 - 135
Nitrobenzene	30.0	25.6		ug/L		85	47 - 120
2-Nitrophenol	30.0	27.3		ug/L		91	28 - 136
4-Nitrophenol	60.0	58.7		ug/L		98	10 - 150
N-Nitrosodimethylamine	30.0	29.9		ug/L		100	22 - 148
N-Nitrosodi-n-propylamine	30.0	31.3		ug/L		104	44 - 120
N-Nitrosodiphenylamine	29.8	29.2		ug/L		98	56 - 120
Pentachlorophenol	60.0	49.2		ug/L		82	15 - 141
Phenol	30.0	24.2		ug/L		81	33 - 120
Pyridine	60.0	44.5		ug/L		74	26 - 120
Quinoline	30.0	25.3		ug/L		84	51 - 129
2,4,5-Trichlorophenol	30.0	28.7		ug/L		96	38 - 147
2,4,6-Trichlorophenol	30.0	27.3		ug/L		91	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*34 - 120*
2-Fluorophenol	*61*		*10 - 120*
Nitrobenzene-d5	*91*		*27 - 120*
Phenol-d5	*76*		*10 - 120*
Terphenyl-d14	*107*		*53 - 125*
2,4,6-Tribromophenol	*89*		*15 - 135*

Lab Sample ID: LCSD 400-461509/30-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120	57	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*67*		*10 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Phenol-d5	*76*		*10 - 120*
Terphenyl-d14	*105*		*53 - 125*
2,4,6-Tribromophenol	*68*		*15 - 135*

Lab Sample ID: LCSD 400-461509/3-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	21.2	*	ug/L		71	29 - 120	31	30
Benzoic acid	117	72.8		ug/L		62	10 - 150	16	30
Benzyl alcohol	30.0	19.1		ug/L		64	19 - 125	18	30
Bis(2-chloroethoxy)methane	30.0	23.1		ug/L		77	45 - 120	13	30

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

Lab Sample ID: LCSD 400-461509/3-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	30.0	24.9		ug/L		83	48 - 120	2	30
bis (2-chloroisopropyl) ether	30.0	23.2		ug/L		77	30 - 125	15	30
Bis(2-ethylhexyl) phthalate	30.0	24.8	*	ug/L		83	48 - 150	57	30
4-Bromophenyl phenyl ether	30.0	22.7		ug/L		76	55 - 122	18	30
Butyl benzyl phthalate	30.0	27.5		ug/L		92	46 - 145	18	30
4-Chloroaniline	30.0	21.4		ug/L		71	30 - 120	15	30
4-Chloro-3-methylphenol	30.0	24.2		ug/L		81	39 - 140	13	30
2-Chloronaphthalene	30.0	22.7		ug/L		76	52 - 120	12	30
2-Chlorophenol	30.0	22.9		ug/L		76	34 - 120	11	30
4-Chlorophenyl phenyl ether	30.0	22.6		ug/L		75	58 - 124	18	30
Dibenz[a,h]acridine	30.0	17.8	*	ug/L		59	46 - 149	31	30
Dibenzofuran	30.0	24.6		ug/L		82	58 - 123	14	30
3,3'-Dichlorobenzidine	40.0	34.0		ug/L		85	39 - 135	20	30
2,4-Dichlorophenol	30.0	23.2		ug/L		77	39 - 128	13	30
Diethyl phthalate	30.0	27.5		ug/L		92	44 - 146	15	30
2,4-Dimethylphenol	30.0	24.2		ug/L		81	44 - 120	13	30
Dimethyl phthalate	30.0	24.9		ug/L		83	50 - 131	14	30
Di-n-butyl phthalate	30.0	27.3		ug/L		91	55 - 131	18	30
4,6-Dinitro-ortho-cresol	60.0	49.0		ug/L		82	10 - 150	18	30
2,4-Dinitrophenol	60.0	47.8		ug/L		80	10 - 150	15	30
2,4-Dinitrotoluene	30.0	25.9		ug/L		86	58 - 140	17	30
2,6-Dinitrotoluene	30.0	25.0		ug/L		83	57 - 130	16	30
Di-n-octyl phthalate	30.0	24.1		ug/L		80	50 - 150	24	30
1,4-Dioxane	30.0	16.9		ug/L		56	25 - 120	11	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	26.1		ug/L		87	47 - 123	15	30
Hexachlorobenzene	30.0	22.0		ug/L		73	52 - 131	23	30
Hexachlorocyclopentadiene	30.0	ND	*	ug/L		5	10 - 129	4	30
Hexachloroethane	30.0	15.6		ug/L		52	41 - 120	21	30
Indene	30.0	22.2		ug/L		74	47 - 120	15	30
Isophorone	30.0	22.9		ug/L		76	49 - 120	13	30
2-Methylphenol	30.0	27.6		ug/L		92	39 - 123	15	30
3 & 4 Methylphenol	30.0	23.3		ug/L		78	38 - 121	15	30
2-Nitroaniline	30.0	25.7		ug/L		86	47 - 150	18	30
3-Nitroaniline	30.0	24.4		ug/L		81	34 - 132	15	30
4-Nitroaniline	30.0	27.4		ug/L		91	41 - 135	16	30
Nitrobenzene	30.0	22.4		ug/L		75	47 - 120	13	30
2-Nitrophenol	30.0	24.3		ug/L		81	28 - 136	12	30
4-Nitrophenol	60.0	46.9		ug/L		78	10 - 150	22	30
N-Nitrosodimethylamine	30.0	25.2		ug/L		84	22 - 148	17	30
N-Nitrosodi-n-propylamine	30.0	26.4		ug/L		88	44 - 120	17	30
N-Nitrosodiphenylamine	29.8	25.2		ug/L		85	56 - 120	15	30
Pentachlorophenol	60.0	43.1		ug/L		72	15 - 141	13	30
Phenol	30.0	21.2		ug/L		71	33 - 120	13	30
Pyridine	60.0	38.2		ug/L		64	26 - 120	15	30
Quinoline	30.0	21.7		ug/L		72	51 - 129	15	30
2,4,5-Trichlorophenol	30.0	24.9		ug/L		83	38 - 147	14	30
2,4,6-Trichlorophenol	30.0	23.5		ug/L		78	36 - 139	15	30

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

Lab Sample ID: LCSD 400-461509/3-A
Matrix: Water
Analysis Batch: 463207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461509

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*34 - 120*
2-Fluorophenol	*58*		*10 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Phenol-d5	*68*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*74*		*15 - 135*

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
Benzenethiol	ND		10	1.7	ug/L		10/22/19 10:51	11/02/19 10:13	1
Benzoic acid	ND		30	7.3	ug/L		10/22/19 10:51	11/02/19 10:13	1
Benzyl alcohol	ND		10	2.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/22/19 10:51	11/02/19 10:13	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/22/19 10:51	11/02/19 10:13	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/22/19 10:51	11/02/19 10:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/22/19 10:51	11/02/19 10:13	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Chloroaniline	ND		10	3.4	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Chlorophenol	ND		10	2.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Dibenzofuran	ND		10	0.52	ug/L		10/22/19 10:51	11/02/19 10:13	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Diethyl phthalate	ND		10	0.70	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/22/19 10:51	11/02/19 10:13	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/22/19 10:51	11/02/19 10:13	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/22/19 10:51	11/02/19 10:13	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/22/19 10:51	11/02/19 10:13	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/22/19 10:51	11/02/19 10:13	1
1,4-Dioxane	ND		10	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/22/19 10:51	11/02/19 10:13	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/22/19 10:51	11/02/19 10:13	1
Hexachloroethane	ND		10	4.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
Indene	ND		10	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Isophorone	ND		10	0.57	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Methylphenol	ND		10	1.8	ug/L		10/22/19 10:51	11/02/19 10:13	1

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

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Nitroaniline	ND		10	2.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
3-Nitroaniline	ND		10	1.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Nitroaniline	ND		10	2.5	ug/L		10/22/19 10:51	11/02/19 10:13	1
Nitrobenzene	ND		10	0.55	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Nitrophenol	ND		10	0.65	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Nitrophenol	ND		10	2.1	ug/L		10/22/19 10:51	11/02/19 10:13	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/22/19 10:51	11/02/19 10:13	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/22/19 10:51	11/02/19 10:13	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/22/19 10:51	11/02/19 10:13	1
Pentachlorophenol	ND		20	1.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
Phenol	ND		10	2.6	ug/L		10/22/19 10:51	11/02/19 10:13	1
Pyridine	ND		10	3.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
Quinoline	ND		10	6.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/22/19 10:51	11/02/19 10:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*34 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
Nitrobenzene-d5	*105*		*27 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
Phenol-d5	*92*		*10 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
Terphenyl-d14	*116*		*53 - 125*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*10/22/19 10:51*	*11/02/19 10:13*	*1*

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	29.9		ug/L		100	29 - 120
Benzoic acid	117	105		ug/L		90	10 - 150
Benzyl alcohol	30.0	28.4		ug/L		95	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.6		ug/L		79	45 - 120
Bis(2-chloroethyl)ether	30.0	21.3		ug/L		71	48 - 120
bis (2-chloroisopropyl) ether	30.0	23.1		ug/L		77	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	21.1		ug/L		70	48 - 150
4-Bromophenyl phenyl ether	30.0	25.7		ug/L		86	55 - 122
Butyl benzyl phthalate	30.0	24.4		ug/L		81	46 - 145
4-Chloroaniline	30.0	25.8		ug/L		86	30 - 120
4-Chloro-3-methylphenol	30.0	27.7		ug/L		92	39 - 140
2-Chloronaphthalene	30.0	23.9		ug/L		80	52 - 120
2-Chlorophenol	30.0	21.6		ug/L		72	34 - 120
4-Chlorophenyl phenyl ether	30.0	23.5		ug/L		78	58 - 124
Dibenz[a,h]acridine	30.0	18.3		ug/L		61	46 - 149
Dibenzofuran	30.0	24.2		ug/L		81	58 - 123
3,3'-Dichlorobenzidine	40.0	45.4		ug/L		114	39 - 135
2,4-Dichlorophenol	30.0	24.7		ug/L		82	39 - 128

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

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diethyl phthalate	30.0	26.6		ug/L		89	44 - 146
2,4-Dimethylphenol	30.0	24.2		ug/L		81	44 - 120
Dimethyl phthalate	30.0	26.8		ug/L		89	50 - 131
Di-n-butyl phthalate	30.0	22.8		ug/L		76	55 - 131
4,6-Dinitro-ortho-cresol	60.0	63.2		ug/L		105	10 - 150
2,4-Dinitrophenol	60.0	71.3		ug/L		119	10 - 150
2,4-Dinitrotoluene	30.0	29.1		ug/L		97	58 - 140
2,6-Dinitrotoluene	30.0	29.3		ug/L		98	57 - 130
Di-n-octyl phthalate	30.0	24.6		ug/L		82	50 - 150
1,4-Dioxane	30.0	16.2		ug/L		54	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.8		ug/L		79	47 - 123
Hexachlorobenzene	30.0	24.9		ug/L		83	52 - 131
Hexachlorocyclopentadiene	30.0	11.7	J	ug/L		39	10 - 129
Hexachloroethane	30.0	16.2		ug/L		54	41 - 120
Indene	30.0	24.8		ug/L		83	47 - 120
Isophorone	30.0	25.0		ug/L		83	49 - 120
2-Methylphenol	30.0	25.9		ug/L		86	39 - 123
3 & 4 Methylphenol	30.0	24.6		ug/L		82	38 - 121
2-Nitroaniline	30.0	28.9		ug/L		96	47 - 150
3-Nitroaniline	30.0	32.7		ug/L		109	34 - 132
4-Nitroaniline	30.0	32.5		ug/L		108	41 - 135
Nitrobenzene	30.0	24.6		ug/L		82	47 - 120
2-Nitrophenol	30.0	26.5		ug/L		88	28 - 136
4-Nitrophenol	60.0	62.2		ug/L		104	10 - 150
N-Nitrosodimethylamine	30.0	26.3		ug/L		88	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.4		ug/L		81	44 - 120
N-Nitrosodiphenylamine	29.8	27.1		ug/L		91	56 - 120
Pentachlorophenol	60.0	55.3		ug/L		92	15 - 141
Phenol	30.0	21.6		ug/L		72	33 - 120
Pyridine	60.0	40.5		ug/L		68	26 - 120
Quinoline	30.0	27.9		ug/L		93	51 - 129
2,4,5-Trichlorophenol	30.0	30.2		ug/L		101	38 - 147
2,4,6-Trichlorophenol	30.0	29.5		ug/L		98	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*88*		*27 - 120*
Phenol-d5	*78*		*10 - 120*
Terphenyl-d14	*91*		*53 - 125*
2,4,6-Tribromophenol	*99*		*15 - 135*

Lab Sample ID: LCS 400-462605/6-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

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)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	86		34 - 120
2-Fluorophenol	37		10 - 120
Nitrobenzene-d5	93		27 - 120
Phenol-d5	75		10 - 120
Terphenyl-d14	99		53 - 125
2,4,6-Tribromophenol	44		15 - 135

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	31.3		ug/L		104	29 - 120	5	30
Benzoic acid	117	120		ug/L		103	10 - 150	13	30
Benzyl alcohol	30.0	31.5		ug/L		105	19 - 125	10	30
Bis(2-chloroethoxy)methane	30.0	25.7		ug/L		86	45 - 120	8	30
Bis(2-chloroethyl)ether	30.0	23.3		ug/L		78	48 - 120	9	30
bis (2-chloroisopropyl) ether	30.0	24.5		ug/L		82	30 - 125	6	30
Bis(2-ethylhexyl) phthalate	30.0	24.2		ug/L		81	48 - 150	14	30
4-Bromophenyl phenyl ether	30.0	27.4		ug/L		91	55 - 122	6	30
Butyl benzyl phthalate	30.0	25.5		ug/L		85	46 - 145	5	30
4-Chloroaniline	30.0	24.8		ug/L		83	30 - 120	4	30
4-Chloro-3-methylphenol	30.0	30.3		ug/L		101	39 - 140	9	30
2-Chloronaphthalene	30.0	25.1		ug/L		84	52 - 120	5	30
2-Chlorophenol	30.0	25.4		ug/L		85	34 - 120	16	30
4-Chlorophenyl phenyl ether	30.0	24.2		ug/L		81	58 - 124	3	30
Dibenz[a,h]acridine	30.0	19.8		ug/L		66	46 - 149	8	30
Dibenzofuran	30.0	25.8		ug/L		86	58 - 123	6	30
3,3'-Dichlorobenzidine	40.0	48.2		ug/L		121	39 - 135	6	30
2,4-Dichlorophenol	30.0	27.3		ug/L		91	39 - 128	10	30
Diethyl phthalate	30.0	28.1		ug/L		94	44 - 146	6	30
2,4-Dimethylphenol	30.0	26.0		ug/L		87	44 - 120	7	30
Dimethyl phthalate	30.0	28.3		ug/L		94	50 - 131	6	30
Di-n-butyl phthalate	30.0	23.7		ug/L		79	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	67.2		ug/L		112	10 - 150	6	30
2,4-Dinitrophenol	60.0	74.4		ug/L		124	10 - 150	4	30
2,4-Dinitrotoluene	30.0	30.7		ug/L		102	58 - 140	5	30
2,6-Dinitrotoluene	30.0	30.8		ug/L		103	57 - 130	5	30
Di-n-octyl phthalate	30.0	25.2		ug/L		84	50 - 150	2	30
1,4-Dioxane	30.0	19.0		ug/L		63	25 - 120	16	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	26.4		ug/L		88	47 - 123	10	30
Hexachlorobenzene	30.0	25.4		ug/L		85	52 - 131	2	30
Hexachlorocyclopentadiene	30.0	11.6	J	ug/L		39	10 - 129	1	30
Hexachloroethane	30.0	18.1		ug/L		60	41 - 120	11	30
Indene	30.0	26.7		ug/L		89	47 - 120	7	30
Isophorone	30.0	27.0		ug/L		90	49 - 120	8	30
2-Methylphenol	30.0	28.3		ug/L		94	39 - 123	9	30
3 & 4 Methylphenol	30.0	27.0		ug/L		90	38 - 121	9	30
2-Nitroaniline	30.0	30.8		ug/L		103	47 - 150	6	30
3-Nitroaniline	30.0	35.0		ug/L		117	34 - 132	7	30
4-Nitroaniline	30.0	34.8		ug/L		116	41 - 135	7	30

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

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrobenzene	30.0	26.9		ug/L		90	47 - 120	9	30
2-Nitrophenol	30.0	29.7		ug/L		99	28 - 136	11	30
4-Nitrophenol	60.0	64.8		ug/L		108	10 - 150	4	30
N-Nitrosodimethylamine	30.0	29.2		ug/L		97	22 - 148	11	30
N-Nitrosodi-n-propylamine	30.0	25.9		ug/L		86	44 - 120	6	30
N-Nitrosodiphenylamine	29.8	29.7		ug/L		100	56 - 120	9	30
Pentachlorophenol	60.0	61.5		ug/L		102	15 - 141	11	30
Phenol	30.0	24.7		ug/L		82	33 - 120	13	30
Pyridine	60.0	45.1		ug/L		75	26 - 120	11	30
Quinoline	30.0	30.9		ug/L		103	51 - 129	10	30
2,4,5-Trichlorophenol	30.0	32.8		ug/L		109	38 - 147	8	30
2,4,6-Trichlorophenol	30.0	32.2		ug/L		107	36 - 139	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*34 - 120*
2-Fluorophenol	*55*		*10 - 120*
Nitrobenzene-d5	*98*		*27 - 120*
Phenol-d5	*90*		*10 - 120*
Terphenyl-d14	*99*		*53 - 125*
2,4,6-Tribromophenol	*105*		*15 - 135*

Lab Sample ID: LCSD 400-462605/7-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*34 - 120*
2-Fluorophenol	*19*		*10 - 120*
Nitrobenzene-d5	*90*		*27 - 120*
Phenol-d5	*64*		*10 - 120*
Terphenyl-d14	*96*		*53 - 125*
2,4,6-Tribromophenol	*26*		*15 - 135*

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Anthracene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1

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

Lab Sample ID: MB 400-461393/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Chrysene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Fluoranthene	0.0426	J	0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Fluorene	ND		0.20	0.021	ug/L		10/14/19 08:18	10/23/19 07:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/14/19 08:18	10/23/19 07:52	1
Phenanthrene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
Pyrene	0.0497	J	0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/14/19 08:18	10/23/19 07:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*33 - 138*	*10/14/19 08:18*	*10/23/19 07:52*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*10/14/19 08:18*	*10/23/19 07:52*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*10/14/19 08:18*	*10/23/19 07:52*	*1*

Lab Sample ID: LCS 400-461393/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461393

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	26.2		ug/L		87	44 - 120
Anthracene	30.0	23.5		ug/L		78	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	25.8		ug/L		86	52 - 120
Benzo[b]fluoranthene	30.0	27.1		ug/L		90	53 - 134
Benzo[g,h,i]perylene	30.0	22.2		ug/L		74	47 - 133
Benzo[k]fluoranthene	30.0	25.8		ug/L		86	57 - 134
Chrysene	30.0	22.9		ug/L		76	55 - 122
Dibenz(a,h)anthracene	30.0	24.3		ug/L		81	48 - 146
Fluoranthene	30.0	23.9		ug/L		80	54 - 128
Fluorene	30.0	25.2		ug/L		84	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	23.6		ug/L		79	43 - 142
Phenanthrene	30.0	23.3		ug/L		78	48 - 120
Pyrene	30.0	24.8		ug/L		83	48 - 132
1-Methylnaphthalene	30.0	21.8		ug/L		73	41 - 120
2-Methylnaphthalene	30.0	21.1		ug/L		70	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*79*		*33 - 138*
2-Fluorobiphenyl	*78*		*15 - 122*
Nitrobenzene-d5	*76*		*19 - 130*

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

Lab Sample ID: LCSD 400-461393/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	25.8		ug/L		86	41 - 120	5	56
Acenaphthylene	30.0	28.8		ug/L		96	44 - 120	9	56
Anthracene	30.0	23.5		ug/L		78	49 - 120	0	51
Benzo[a]anthracene	30.0	22.5		ug/L		75	61 - 135	4	49
Benzo[a]pyrene	30.0	25.3		ug/L		84	52 - 120	2	50
Benzo[b]fluoranthene	30.0	26.4		ug/L		88	53 - 134	3	54
Benzo[g,h,i]perylene	30.0	21.7		ug/L		72	47 - 133	2	50
Benzo[k]fluoranthene	30.0	25.7		ug/L		86	57 - 134	0	52
Chrysene	30.0	22.1		ug/L		74	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	24.0		ug/L		80	48 - 146	1	50
Fluoranthene	30.0	24.0		ug/L		80	54 - 128	0	52
Fluorene	30.0	26.2		ug/L		87	45 - 125	4	56
Indeno[1,2,3-cd]pyrene	30.0	23.4		ug/L		78	43 - 142	1	51
Phenanthrene	30.0	23.3		ug/L		78	48 - 120	0	56
Pyrene	30.0	23.7		ug/L		79	48 - 132	5	52
1-Methylnaphthalene	30.0	22.9		ug/L		76	41 - 120	5	55
2-Methylnaphthalene	30.0	22.8		ug/L		76	32 - 124	8	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*78*		*33 - 138*
2-Fluorobiphenyl	*82*		*15 - 122*
Nitrobenzene-d5	*82*		*19 - 130*

Lab Sample ID: MB 400-461509/1-A
Matrix: Water
Analysis Batch: 462486

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	*	0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
Acenaphthylene	ND	*	0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
Anthracene	ND	*	0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Benzo[b]fluoranthene	0.154	J	0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Chrysene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Fluoranthene	ND	*	0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
Fluorene	ND	*	0.20	0.021	ug/L		10/14/19 17:42	10/22/19 00:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/14/19 17:42	10/22/19 00:06	1
Phenanthrene	ND	*	0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
Pyrene	ND		0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/14/19 17:42	10/22/19 00:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*235*	*X*	*33 - 138*	*10/14/19 17:42*	*10/22/19 00:06*	*1*

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

Lab Sample ID: MB 400-461509/1-A
Matrix: Water
Analysis Batch: 462486

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461509

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	163	X *	15 - 122	10/14/19 17:42	10/22/19 00:06	1
Nitrobenzene-d5	159	X	19 - 130	10/14/19 17:42	10/22/19 00:06	1

Lab Sample ID: LCS 400-461509/2-A
Matrix: Water
Analysis Batch: 462486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	29.7		ug/L		99	41 - 120
Acenaphthylene	30.0	28.5		ug/L		95	44 - 120
Anthracene	30.0	29.2		ug/L		97	49 - 120
Benzo[a]anthracene	30.0	27.4		ug/L		91	61 - 135
Benzo[a]pyrene	30.0	24.0		ug/L		80	52 - 120
Benzo[b]fluoranthene	30.0	23.3		ug/L		78	53 - 134
Benzo[g,h,i]perylene	30.0	24.6		ug/L		82	47 - 133
Benzo[k]fluoranthene	30.0	28.2		ug/L		94	57 - 134
Chrysene	30.0	27.1		ug/L		90	55 - 122
Dibenz(a,h)anthracene	30.0	30.2		ug/L		101	48 - 146
Fluoranthene	30.0	29.8		ug/L		99	54 - 128
Fluorene	30.0	36.1		ug/L		120	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	27.5		ug/L		92	43 - 142
Phenanthrene	30.0	29.8		ug/L		99	48 - 120
Pyrene	30.0	35.8		ug/L		119	48 - 132
1-Methylnaphthalene	30.0	21.3		ug/L		71	41 - 120
2-Methylnaphthalene	30.0	20.4		ug/L		68	32 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	126		33 - 138
2-Fluorobiphenyl	90		15 - 122
Nitrobenzene-d5	87		19 - 130

Lab Sample ID: LCSD 400-461509/3-A
Matrix: Water
Analysis Batch: 462486

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	24.9		ug/L		83	41 - 120	18	56
Acenaphthylene	30.0	23.7		ug/L		79	44 - 120	18	56
Anthracene	30.0	24.0		ug/L		80	49 - 120	19	51
Benzo[a]anthracene	30.0	21.5		ug/L		72	61 - 135	24	49
Benzo[a]pyrene	30.0	18.7		ug/L		62	52 - 120	25	50
Benzo[b]fluoranthene	30.0	17.3		ug/L		58	53 - 134	30	54
Benzo[g,h,i]perylene	30.0	19.8		ug/L		66	47 - 133	22	50
Benzo[k]fluoranthene	30.0	21.7		ug/L		72	57 - 134	26	52
Chrysene	30.0	21.6		ug/L		72	55 - 122	23	50
Dibenz(a,h)anthracene	30.0	25.4		ug/L		85	48 - 146	17	50
Fluoranthene	30.0	22.5		ug/L		75	54 - 128	28	52
Fluorene	30.0	28.5		ug/L		95	45 - 125	23	56

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

Lab Sample ID: LCSD 400-461509/3-A
Matrix: Water
Analysis Batch: 462486

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461509

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene	30.0	22.0		ug/L		73	43 - 142	22	51
Phenanthrene	30.0	24.1		ug/L		80	48 - 120	21	56
Pyrene	30.0	27.7		ug/L		92	48 - 132	25	52
1-Methylnaphthalene	30.0	19.2		ug/L		64	41 - 120	10	55
2-Methylnaphthalene	30.0	18.6		ug/L		62	32 - 124	9	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*107*		*33 - 138*
2-Fluorobiphenyl	*81*		*15 - 122*
Nitrobenzene-d5	*82*		*19 - 130*

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Anthracene	0.0388	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[a]anthracene	0.0872	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[a]pyrene	0.0949	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[b]fluoranthene	0.0858	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[g,h,i]perylene	0.0798	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[k]fluoranthene	0.0982	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Chrysene	0.0787	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Dibenz(a,h)anthracene	0.0892	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Fluoranthene	0.0407	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Fluorene	ND		0.20	0.021	ug/L		10/22/19 10:51	11/04/19 21:03	1
Indeno[1,2,3-cd]pyrene	0.0998	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Phenanthrene	0.0375	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Pyrene	0.0452	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*144*	*X*	*33 - 138*	*10/22/19 10:51*	*11/04/19 21:03*	*1*
2-Fluorobiphenyl	*114*		*15 - 122*	*10/22/19 10:51*	*11/04/19 21:03*	*1*
Nitrobenzene-d5	*111*		*19 - 130*	*10/22/19 10:51*	*11/04/19 21:03*	*1*

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	27.8		ug/L		93	41 - 120
Acenaphthylene	30.0	27.9		ug/L		93	44 - 120
Anthracene	30.0	28.1		ug/L		94	49 - 120
Benzo[a]anthracene	30.0	26.4		ug/L		88	61 - 135

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

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120
Benzo[b]fluoranthene	30.0	27.0		ug/L		90	53 - 134
Benzo[g,h,i]perylene	30.0	28.4		ug/L		95	47 - 133
Benzo[k]fluoranthene	30.0	29.0		ug/L		97	57 - 134
Chrysene	30.0	27.1		ug/L		90	55 - 122
Dibenz(a,h)anthracene	30.0	28.5		ug/L		95	48 - 146
Fluoranthene	30.0	28.4		ug/L		95	54 - 128
Fluorene	30.0	29.0		ug/L		97	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	29.5		ug/L		98	43 - 142
Phenanthrene	30.0	26.1		ug/L		87	48 - 120
Pyrene	30.0	28.4		ug/L		95	48 - 132
1-Methylnaphthalene	30.0	21.3		ug/L		71	41 - 120
2-Methylnaphthalene	30.0	20.3		ug/L		68	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*111*		*33 - 138*
2-Fluorobiphenyl	*94*		*15 - 122*
Nitrobenzene-d5	*83*		*19 - 130*

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.4		ug/L		98	41 - 120	6	56
Acenaphthylene	30.0	29.5		ug/L		98	44 - 120	6	56
Anthracene	30.0	29.0		ug/L		97	49 - 120	3	51
Benzo[a]anthracene	30.0	27.2		ug/L		91	61 - 135	3	49
Benzo[a]pyrene	30.0	27.6		ug/L		92	52 - 120	5	50
Benzo[b]fluoranthene	30.0	28.1		ug/L		94	53 - 134	4	54
Benzo[g,h,i]perylene	30.0	30.7		ug/L		102	47 - 133	8	50
Benzo[k]fluoranthene	30.0	29.2		ug/L		97	57 - 134	1	52
Chrysene	30.0	27.9		ug/L		93	55 - 122	3	50
Dibenz(a,h)anthracene	30.0	30.6		ug/L		102	48 - 146	7	50
Fluoranthene	30.0	29.9		ug/L		100	54 - 128	5	52
Fluorene	30.0	31.3		ug/L		104	45 - 125	8	56
Indeno[1,2,3-cd]pyrene	30.0	31.7		ug/L		106	43 - 142	7	51
Phenanthrene	30.0	27.1		ug/L		90	48 - 120	4	56
Pyrene	30.0	28.5		ug/L		95	48 - 132	1	52
1-Methylnaphthalene	30.0	22.7		ug/L		76	41 - 120	6	55
2-Methylnaphthalene	30.0	21.7		ug/L		72	32 - 124	7	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*116*		*33 - 138*
2-Fluorobiphenyl	*101*		*15 - 122*
Nitrobenzene-d5	*84*		*19 - 130*

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

Lab Sample ID: MB 400-461509/1-A
Matrix: Water
Analysis Batch: 463641

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene - RA	ND		0.20	0.020	ug/L		10/14/19 17:42	10/30/19 02:01	1
Acenaphthylene - RA	ND		0.20	0.020	ug/L		10/14/19 17:42	10/30/19 02:01	1
Anthracene - RA	ND		0.20	0.020	ug/L		10/14/19 17:42	10/30/19 02:01	1
Fluoranthene - RA	0.0527	J	0.20	0.020	ug/L		10/14/19 17:42	10/30/19 02:01	1
Fluorene - RA	ND		0.20	0.021	ug/L		10/14/19 17:42	10/30/19 02:01	1
Phenanthrene - RA	ND		0.20	0.020	ug/L		10/14/19 17:42	10/30/19 02:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 - RA	*82*		*33 - 138*	*10/14/19 17:42*	*10/30/19 02:01*	*1*
2-Fluorobiphenyl - RA	*71*		*15 - 122*	*10/14/19 17:42*	*10/30/19 02:01*	*1*
Nitrobenzene-d5 - RA	*76*		*19 - 130*	*10/14/19 17:42*	*10/30/19 02:01*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-460985/1-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460985

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		10/10/19 14:04	10/10/19 16:54	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/10/19 14:04	10/10/19 16:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*10/10/19 14:04*	*10/10/19 16:54*	*1*

Lab Sample ID: LCS 400-460985/2-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460985

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.122		ug/L		122	60 - 140
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*51 - 149*

Lab Sample ID: LCSD 400-460985/3-A
Matrix: Water
Analysis Batch: 461023

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460985

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.118		ug/L		118	60 - 140	1	30
1,2-Dibromoethane	0.100	0.110		ug/L		110	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (Lab Vendor # 1364589 (TestAmerica))

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL
☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES
☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/8/19
PAGE: 1 of 1

P.O. #: 60592794 - 1.03.004 | 60592794 - 1.03.0044

GSAP Project ID: USPC/00114/R/02

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW
60592794 - 1.03.004 | 60592794 - 1.03.0044

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 B Burleson

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ 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 - 1.03.004 | UNIT COST 60592794 - 1.03.0044

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

400-177718 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TB-ROX-100819-8011	10/8/19	0000	Water	X					2			2	
	TB-ROX-100819-8260 ←	↓	0000	↓	X					2	2			
	MW4-ROX-100819 ←		0900		X			X		6	2	1	2	1
	MW25-ROX-100819 ←		1005		X			X		6	2	1	2	1
	MW8-ROX-100819 ←		1155		X			X		6	2	1	2	1
	MW7-ROX-100819 ←		1340		X			X		6	2	1	2	1
	MW7-ROX-100819-DUP ←	↓	1340	↓	X			X		6	2	1	2	1

	Received by (Signature)	Date	Time
Relinquished by (Signature)	1155 5318 3447 / Fedex: 1155 5318 3436	10/8/19	1600
Relinquished by (Signature)	1155 5318 3425 / 1155 5318 3414		
Relinquished by (Signature)			

custody seals #: 1106246, 1106247, 1106248, 1106249, 1106250, 1106251, 1106252, 1106253

4.6°C IR7 4.0°C IR7 3.8°C IR7 5.7°C IR7

Version: 14Dec15

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11/6/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177718-1

Login Number: 177718
List Number: 1
Creator: Gore, Beija K

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	4.6°C, 4.0°C, 3.8°C, 5.7 °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: 400-177718-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177791-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/25/2019

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

Sample Identification	Sample Identification
TB-ROX-100919-8260	TB-ROX-100919-8011
MW26-ROX-100919-EB	MW26-ROX-100919
MW13-ROX-100919	P114R-ROX-100919

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, although not indicated in the laboratory case narrative, bis(2-thylhexyl) phthalate was detected in equipment blank MW26-ROX-100919-EB. The laboratory case narrative indicated several VOC and SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The PAH surrogate recovery for terphenyl-d_{14} was outside criteria in sample P114R-ROX-100919, and several SVOC and VOC by 8011 surrogate recoveries were outside criteria in QC samples. Several VOC and SVOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW26-ROX-100919. The internal standard area recovery for perylene-d_{12} was outside criteria in the SVOC LCS/LCSD. The continuing calibration verifications for 4,6-dinitro-ortho-cresol and hexachlorocyclopentadiene 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
MW26-ROX-100919-EB	SVOCs	bis(2-Ethylhexyl) phthalate	6.6 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
MW26-ROX-100919	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 400-462264/1002	VOCs	Chloromethane	**145**	NA	58-137
LCS/LCSD 400-461888/2-A/3-A	SVOCs	Benzoic acid	12/71	**141**	10-150/30
LCS/LCSD 400-461888/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**142**/126	12	39-135/30
LCS/LCSD 400-461888/2-A/3-A	SVOCs	n-Nitrosodimethylamine	95/63	**41**	22-148/30
LCS/LCSD 400-461888/2-A/3-A	SVOCs	Pyridine	80/53	**41**	26-120/30
LCS/LCSD 400-461888/6-A/7-A	SVOCs	Benzenethiol	40/27	**39**	10-120/30

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

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P114R-ROX-100919	PAHs	Terphenyl-d_{14}	**29**	33-138
LCS 400-461888/6-A	SVOCs	2-Fluorobiphenyl	**171**	34-120
LCS 400-461888/6-A	SVOCs	Terphenyl-d_{14}	**187**	53-125
LCS 400-461888/6-A	SVOCs	2,4,6-Tribromophenol	**155**	15-135
400-177791-4 MS	VOCs by 8011	4-Bromofluorobenzene	**167**	51-149
400-177791-4 MSD	VOCs by 8011	4-Bromofluorobenzene	**164**	51-149

Qualifications due to surrogate recoveries were not required if only one of three base/neutral PAH surrogate recoveries were outside evaluation criteria in the associated samples. Laboratory control samples and MS/MSDs 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 MW26-ROX-100919 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
MW26-ROX-100919	VOCs	Acetone	**41**/43	3	43-150/30
MW26-ROX-100919	VOCs	2-Butanone (MEK)	**53**/60	11	55-150/30
MW26-ROX-100919	VOCs	2-Chloroethyl vinyl ether	**7/0**	**NC**	10-150/50
MW26-ROX-100919	VOCs	2-Hexanone	**57**/65	13	65-140/30
MW26-ROX-100919	SVOCs	bis(2-Chloroethyl) ether	**134/134**	1	28-130/42
MW26-ROX-100919	SVOCs	2-Chloronaphthalene	**0**/93	**NC**	10-155/29

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
MW26-ROX-100919	VOCs	Acetone	**UJ**
MW26-ROX-100919	VOCs	2-Butanone (MEK)	**UJ**
MW26-ROX-100919	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW26-ROX-100919	VOCs	2-Hexanone	**UJ**
MW26-ROX-100919	SVOCs	2-Chloronaphthalene	**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
LCS 400-461888/6-A	SVOCs	Perylene-d_{12}	**6362**	193547-774186
LCSD 400-461888/7-A	SVOCs	Perylene-d_{12}	**168816**	193547-774186

LCS/LCSDs are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, several continuing calibration verifications were below acceptance criteria; qualifications due to CCV data are summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-100919	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW26-ROX-100919	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW13-ROX-100919	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW13-ROX-100919	SVOCs	Hexachlorocyclopentadiene	**UJ**
P114R-ROX-100919	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P114R-ROX-100919	SVOCs	Hexachlorocyclopentadiene	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-177791-1
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:
11/8/2019 3:11:55 PM

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

LINKS

Review your project results through TotalAccess

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Reviewed 11/25

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: 400-177791-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177791-1

Comments
No additional comments.

Receipt
The samples were received on 10/10/2019 9:19 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.0° C, 0.0° C, 0.5° C, 1.3° C and 1.5° C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) for analytical batch 400-462264 recovered outside control limits for the following analytes: Chloromethane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The 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-100919-8260 (400-177791-1), MW26-ROX-100919-EB (400-177791-3), MW26-ROX-100919 (400-177791-4), MW13-ROX-100919 (400-177791-5) and P114R-ROX-100919 (400-177791-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compounds that degrades in an acidic medium.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-462264 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-462264 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-462264 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270D: The initial calibration verification (ICV) analyzed in batch 400-462934 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464142 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, Di-n-butyl phthalate, Butyl benzyl phthalate and Di-n-octyl phthalate. The samples associated with this CCV were below reporting limits for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464142 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-methylphenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-461888 and analytical batch 400-464142 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: The laboratory control sample (LCS) for preparation batch 400-461888 and analytical batch 400-464020 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 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation

Job ID: 400-177791-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

batch 400-461888 and analytical batch 400-464020 recovered outside control limits for the following analytes: N-Nitrosodimethylamine, Benzoic acid and Pyridine.

Method 8270D: Internal standard (ISTD) response for Perylene-d12 for the following samples were outside acceptance criteria: (LCS 400-461888/6-A) and (LCSD 400-461888/7-A). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461888 and analytical batch 400-464142 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: Surrogate recovery for the following sample was outside the upper control limit: (LCS 400-461888/6-A). Recovery of the associated individual target analyte is passing; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: P114R-ROX-100919 (400-177791-6). These results have been reported and qualified.

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

GC Semi VOA
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: 400-177791-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177791-1	TB-ROX-100919-8260	Water	10/09/19 00:00	10/10/19 09:19	
400-177791-2	TB-ROX-100919-8011	Water	10/09/19 00:00	10/10/19 09:19	
400-177791-3	MW26-ROX-100919-EB	Water	10/09/19 08:40	10/10/19 09:19	
400-177791-4	MW26-ROX-100919	Water	10/09/19 09:30	10/10/19 09:19	
400-177791-5	MW13-ROX-100919	Water	10/09/19 12:20	10/10/19 09:19	
400-177791-6	P114R-ROX-100919	Water	10/09/19 13:35	10/10/19 09:19	

Detection Summary

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

Job ID: 400-177791-1

Client Sample ID: TB-ROX-100919-8260 — Lab Sample ID: 400-177791-1

No Detections.

Client Sample ID: TB-ROX-100919-8011 — Lab Sample ID: 400-177791-2

No Detections.

Client Sample ID: MW26-ROX-100919-EB — Lab Sample ID: 400-177791-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	6.6	J	9.5	4.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW26-ROX-100919 — Lab Sample ID: 400-177791-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	~~6.8~~	J	9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW13-ROX-100919 — Lab Sample ID: 400-177791-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.0		1.0	0.74	ug/L	1		8260B	Total/NA
Acenaphthene	0.64		0.19	0.019	ug/L	1		8270D LL	Total/NA
Anthracene	0.14	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.75		0.19	0.020	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	2.1		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.42		0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P114R-ROX-100919 — Lab Sample ID: 400-177791-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	0.062	J	0.19	0.039	ug/L	1		8270D LL	Total/NA
Pyrene	0.12	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.041	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-100919-8260

Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-1
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			10/19/19 18:25	1
Acrolein	ND		20	10	ug/L			10/19/19 18:25	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 18:25	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 18:25	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 18:25	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 18:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 18:25	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 18:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 18:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 18:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 18:25	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 18:25	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 18:25	1
Chloromethane	ND	*	1.0	0.83	ug/L			10/19/19 18:25	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 18:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 18:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 18:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 18:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 18:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 18:25	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 18:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 18:25	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 18:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 18:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 18:25	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 18:25	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 18:25	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 18:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 18:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 18:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 18:25	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 18:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 18:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 18:25	1

Client Sample ID: TB-ROX-100919-8260

Lab Sample ID: 400-177791-1

Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

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			10/19/19 18:25	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 18:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 18:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 18:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 18:25	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 18:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 18:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 18:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 18:25	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 18:25	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 18:25	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 18:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 18:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 18:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 18:25	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 18:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 18:25	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*10/19/19 18:25*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/19/19 18:25*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/19/19 18:25*	*1*

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

Job ID: 400-177791-1

Client Sample ID: TB-ROX-100919-8011
Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/23/19 08:53	10/23/19 21:51	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/23/19 08:53	10/23/19 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*136*	*p*	*51 - 149*	*10/23/19 08:53*	*10/23/19 21:51*	*1*

Client Sample Results

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

Job ID: 400-177791-1

Client Sample ID: MW26-ROX-100919-EB

Lab Sample ID: 400-177791-3

Date Collected: 10/09/19 08:40
Date Received: 10/10/19 09:19

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

Client Sample ID: MW26-ROX-100919-EB

Lab Sample ID: 400-177791-3

Date Collected: 10/09/19 08:40
Date Received: 10/10/19 09:19

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			10/19/19 20:25	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 20:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 20:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 20:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 20:25	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 20:25	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 20:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 20:25	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 20:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 20:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 20:25	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 20:25	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 20:25	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 20:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 20:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 20:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 20:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 20:25	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 20:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 20:25	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/19/19 20:25*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/19/19 20:25*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/19/19 20:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
Anthracene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Chrysene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Fluoranthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
Fluorene	ND		0.19	0.020	ug/L		10/16/19 19:34	10/30/19 16:26	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:26	1
Phenanthrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
Pyrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 138*	*10/16/19 19:34*	*10/30/19 16:26*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*10/16/19 19:34*	*10/30/19 16:26*	*1*

Client Sample ID: MW26-ROX-100919-EB

Lab Sample ID: 400-177791-3

Date Collected: 10/09/19 08:40
Date Received: 10/10/19 09:19

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	72		19 - 130	10/16/19 19:34	10/30/19 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		10/16/19 19:34	11/01/19 19:10	1
Benzenethiol	ND	*	9.5	1.6	ug/L		10/16/19 19:34	11/01/19 19:10	1
Benzoic acid	ND	*	28	6.9	ug/L		10/16/19 19:34	11/01/19 19:10	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 19:10	1
Bis(2-chloroethoxy)methane	ND		9.5	0.65	ug/L		10/16/19 19:34	11/01/19 19:10	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/16/19 19:34	11/01/19 19:10	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/16/19 19:34	11/01/19 19:10	1
Bis(2-ethylhexyl) phthalate	6.6	J	9.5	4.7	ug/L		10/16/19 19:34	11/06/19 16:00	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/16/19 19:34	11/01/19 19:10	1
Butyl benzyl phthalate	ND		9.5	0.65	ug/L		10/16/19 19:34	11/01/19 19:10	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/16/19 19:34	11/01/19 19:10	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/16/19 19:34	11/01/19 19:10	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/16/19 19:34	11/01/19 19:10	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/16/19 19:34	11/01/19 19:10	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 19:10	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		10/16/19 19:34	11/01/19 19:10	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/16/19 19:34	11/01/19 19:10	1
3,3'-Dichlorobenzidine	ND	*	9.5	2.5	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		10/16/19 19:34	11/01/19 19:10	1
Diethyl phthalate	ND		9.5	0.66	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 19:10	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/16/19 19:34	11/01/19 19:10	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/16/19 19:34	11/01/19 19:10	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/16/19 19:34	11/01/19 19:10	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/16/19 19:34	11/01/19 19:10	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 19:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 19:10	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/16/19 19:34	11/01/19 19:10	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/16/19 19:34	11/01/19 19:10	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/16/19 19:34	11/01/19 19:10	1
Indene	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 19:10	1
Isophorone	ND		9.5	0.54	ug/L		10/16/19 19:34	11/01/19 19:10	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/16/19 19:34	11/01/19 19:10	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/16/19 19:34	11/01/19 19:10	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/16/19 19:34	11/01/19 19:10	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/16/19 19:34	11/01/19 19:10	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/16/19 19:34	11/01/19 19:10	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/16/19 19:34	11/01/19 19:10	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/16/19 19:34	11/01/19 19:10	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/16/19 19:34	11/01/19 19:10	1
N-Nitrosodimethylamine	ND	*	9.5	3.3	ug/L		10/16/19 19:34	11/01/19 19:10	1

Client Sample ID: MW26-ROX-100919-EB

Lab Sample ID: 400-177791-3
Matrix: Water

Date Collected: 10/09/19 08:40
Date Received: 10/10/19 09:19

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		10/16/19 19:34	11/01/19 19:10	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/16/19 19:34	11/01/19 19:10	1
Pentachlorophenol	ND		19	1.7	ug/L		10/16/19 19:34	11/01/19 19:10	1
Phenol	ND		9.5	2.5	ug/L		10/16/19 19:34	11/01/19 19:10	1
Pyridine	ND	*	9.5	3.0	ug/L		10/16/19 19:34	11/01/19 19:10	1
Quinoline	ND		9.5	5.7	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/16/19 19:34	11/01/19 19:10	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 120*	*10/16/19 19:34*	*11/01/19 19:10*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/16/19 19:34*	*11/01/19 19:10*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*10/16/19 19:34*	*11/01/19 19:10*	*1*
Phenol-d5	*63*		*10 - 120*	*10/16/19 19:34*	*11/01/19 19:10*	*1*
Terphenyl-d14	*114*		*53 - 125*	*10/16/19 19:34*	*11/01/19 19:10*	*1*
2,4,6-Tribromophenol	*70*		*15 - 135*	*10/16/19 19:34*	*11/01/19 19:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/23/19 08:53	10/23/19 22:14	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/23/19 08:53	10/23/19 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*140*	*p*	*51 - 149*	*10/23/19 08:53*	*10/23/19 22:14*	*1*

Client Sample Results

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

Job ID: 400-177791-1

Client Sample ID: MW26-ROX-100919

Lab Sample ID: 400-177791-4

Date Collected: 10/09/19 09:30
Date Received: 10/10/19 09:19

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/19/19 16:48	1
Acrolein	ND		20	10	ug/L			10/19/19 16:48	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 16:48	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 16:48	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 16:48	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 16:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 16:48	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 16:48	1
2-Butanone (MEK)	ND	F1 UJ	25	2.6	ug/L			10/19/19 16:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 16:48	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/19/19 16:48	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 16:48	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 16:48	1
Chloromethane	ND	*	1.0	0.83	ug/L			10/19/19 16:48	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 16:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 16:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 16:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 16:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 16:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 16:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 16:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 16:48	1
2-Hexanone	ND	F1 UJ	25	3.1	ug/L			10/19/19 16:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 16:48	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 16:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 16:48	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 16:48	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 16:48	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 16:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 16:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 16:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 16:48	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 16:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 16:48	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 16:48	1

Client Sample ID: MW26-ROX-100919

Lab Sample ID: 400-177791-4

Date Collected: 10/09/19 09:30
Date Received: 10/10/19 09:19

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/19/19 16:48*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/19/19 16:48*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/19/19 16:48*	*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		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
Anthracene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Chrysene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Fluoranthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
Fluorene	ND		0.19	0.020	ug/L		10/16/19 19:34	10/30/19 16:42	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 16:42	1
Phenanthrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
Pyrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*65*		*33 - 138*	*10/16/19 19:34*	*10/30/19 16:42*	*1*
2-Fluorobiphenyl	*69*		*15 - 122*	*10/16/19 19:34*	*10/30/19 16:42*	*1*

Client Sample ID: MW26-ROX-100919

Lab Sample ID: 400-177791-4

Date Collected: 10/09/19 09:30
Date Received: 10/10/19 09:19

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	10/16/19 19:34	10/30/19 16:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		10/16/19 19:34	11/01/19 19:35	1
Benzenethiol	ND	*	9.6	1.6	ug/L		10/16/19 19:34	11/01/19 19:35	1
Benzoic acid	ND	*	29	7.0	ug/L		10/16/19 19:34	11/01/19 19:35	1
Benzyl alcohol	ND		9.6	1.9	ug/L		10/16/19 19:34	11/01/19 19:35	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/16/19 19:34	11/01/19 19:35	1
Bis(2-chloroethyl)ether	ND	F1	9.6	0.71	ug/L		10/16/19 19:34	11/01/19 19:35	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/16/19 19:34	11/01/19 19:35	1
Bis(2-ethylhexyl) phthalate	~~6.8~~	J UJ	9.6	4.8	ug/L		10/16/19 19:34	11/01/19 19:35	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/16/19 19:34	11/01/19 19:35	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/16/19 19:34	11/01/19 19:35	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/16/19 19:34	11/01/19 19:35	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/16/19 19:34	11/01/19 19:35	1
2-Chloronaphthalene	ND	F1 UJ	9.6	0.50	ug/L		10/16/19 19:34	11/01/19 19:35	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/16/19 19:34	11/01/19 19:35	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/16/19 19:34	11/01/19 19:35	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/16/19 19:34	11/01/19 19:35	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/16/19 19:34	11/01/19 19:35	1
3,3'-Dichlorobenzidine	ND	*	9.6	2.5	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/16/19 19:34	11/01/19 19:35	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/16/19 19:34	11/01/19 19:35	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/16/19 19:34	11/01/19 19:35	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/16/19 19:34	11/01/19 19:35	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.9	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/16/19 19:34	11/01/19 19:35	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/16/19 19:34	11/01/19 19:35	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/16/19 19:34	11/01/19 19:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/16/19 19:34	11/01/19 19:35	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/16/19 19:34	11/01/19 19:35	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/16/19 19:34	11/01/19 19:35	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/16/19 19:34	11/01/19 19:35	1
Indene	ND		9.6	0.96	ug/L		10/16/19 19:34	11/01/19 19:35	1
Isophorone	ND		9.6	0.55	ug/L		10/16/19 19:34	11/01/19 19:35	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/16/19 19:34	11/01/19 19:35	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/16/19 19:34	11/01/19 19:35	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/16/19 19:34	11/01/19 19:35	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/16/19 19:34	11/01/19 19:35	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/16/19 19:34	11/01/19 19:35	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/16/19 19:34	11/01/19 19:35	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/16/19 19:34	11/01/19 19:35	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/16/19 19:34	11/01/19 19:35	1
N-Nitrosodimethylamine	ND	*	9.6	3.4	ug/L		10/16/19 19:34	11/01/19 19:35	1

Client Sample ID: MW26-ROX-100919
Date Collected: 10/09/19 09:30
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/16/19 19:34	11/01/19 19:35	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/16/19 19:34	11/01/19 19:35	1
Pentachlorophenol	ND		19	1.7	ug/L		10/16/19 19:34	11/01/19 19:35	1
Phenol	ND		9.6	2.5	ug/L		10/16/19 19:34	11/01/19 19:35	1
Pyridine	ND	*	9.6	3.1	ug/L		10/16/19 19:34	11/01/19 19:35	1
Quinoline	ND		9.6	5.7	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/16/19 19:34	11/01/19 19:35	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/16/19 19:34	11/01/19 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*10/16/19 19:34*	*11/01/19 19:35*	*1*
2-Fluorophenol	*25*		*10 - 120*	*10/16/19 19:34*	*11/01/19 19:35*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*10/16/19 19:34*	*11/01/19 19:35*	*1*
Phenol-d5	*26*		*10 - 120*	*10/16/19 19:34*	*11/01/19 19:35*	*1*
Terphenyl-d14	*74*		*53 - 125*	*10/16/19 19:34*	*11/01/19 19:35*	*1*
2,4,6-Tribromophenol	*28*		*15 - 135*	*10/16/19 19:34*	*11/01/19 19:35*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0052	ug/L		10/23/19 08:53	10/23/19 22:37	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/23/19 08:53	10/23/19 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*	*p*	*51 - 149*	*10/23/19 08:53*	*10/23/19 22:37*	*1*

Client Sample Results

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

Job ID: 400-177791-1

Client Sample ID: MW13-ROX-100919

Date Collected: 10/09/19 12:20
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-5

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

Client Sample ID: MW13-ROX-100919

Lab Sample ID: 400-177791-5

Date Collected: 10/09/19 12:20
Date Received: 10/10/19 09:19

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			10/19/19 20:49	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 20:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 20:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 20:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 20:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 20:49	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 20:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 20:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 20:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 20:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 20:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 20:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 20:49	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 20:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 20:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 20:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 20:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 20:49	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 20:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 20:49	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*10/19/19 20:49*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/19/19 20:49*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*10/19/19 20:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.64		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
Anthracene	0.14	J	0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Chrysene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Fluoranthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
Fluorene	0.75		0.19	0.020	ug/L		10/16/19 19:34	10/30/19 17:30	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 17:30	1
Phenanthrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
Pyrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
1-Methylnaphthalene	2.1		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1
2-Methylnaphthalene	0.42		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*40*		*33 - 138*	*10/16/19 19:34*	*10/30/19 17:30*	*1*
2-Fluorobiphenyl	*53*		*15 - 122*	*10/16/19 19:34*	*10/30/19 17:30*	*1*

Client Sample ID: MW13-ROX-100919

Lab Sample ID: 400-177791-5

Date Collected: 10/09/19 12:20
Date Received: 10/10/19 09:19

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	51		19 - 130	10/16/19 19:34	10/30/19 17:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		10/16/19 19:34	11/01/19 20:50	1
Benzenethiol	ND	*	9.5	1.6	ug/L		10/16/19 19:34	11/01/19 20:50	1
Benzoic acid	ND	*	29	6.9	ug/L		10/16/19 19:34	11/01/19 20:50	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 20:50	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/16/19 19:34	11/01/19 20:50	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/16/19 19:34	11/01/19 20:50	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/16/19 19:34	11/01/19 20:50	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/16/19 19:34	11/01/19 20:50	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/16/19 19:34	11/01/19 20:50	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/16/19 19:34	11/01/19 20:50	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/16/19 19:34	11/01/19 20:50	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/16/19 19:34	11/01/19 20:50	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/16/19 19:34	11/01/19 20:50	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/16/19 19:34	11/01/19 20:50	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 20:50	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/16/19 19:34	11/01/19 20:50	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/16/19 19:34	11/01/19 20:50	1
3,3'-Dichlorobenzidine	ND	*	9.5	2.5	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/16/19 19:34	11/01/19 20:50	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 20:50	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/16/19 19:34	11/01/19 20:50	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/16/19 19:34	11/01/19 20:50	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.5	1.9	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/16/19 19:34	11/01/19 20:50	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/16/19 19:34	11/01/19 20:50	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 20:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 20:50	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/16/19 19:34	11/01/19 20:50	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/16/19 19:34	11/01/19 20:50	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/16/19 19:34	11/01/19 20:50	1
Indene	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 20:50	1
Isophorone	ND		9.5	0.54	ug/L		10/16/19 19:34	11/01/19 20:50	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/16/19 19:34	11/01/19 20:50	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/16/19 19:34	11/01/19 20:50	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/16/19 19:34	11/01/19 20:50	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/16/19 19:34	11/01/19 20:50	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/16/19 19:34	11/01/19 20:50	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/16/19 19:34	11/01/19 20:50	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/16/19 19:34	11/01/19 20:50	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/16/19 19:34	11/01/19 20:50	1
N-Nitrosodimethylamine	ND	*	9.5	3.3	ug/L		10/16/19 19:34	11/01/19 20:50	1

Client Sample ID: MW13-ROX-100919
Date Collected: 10/09/19 12:20
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/16/19 19:34	11/01/19 20:50	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/16/19 19:34	11/01/19 20:50	1
Pentachlorophenol	ND		19	1.7	ug/L		10/16/19 19:34	11/01/19 20:50	1
Phenol	ND		9.5	2.5	ug/L		10/16/19 19:34	11/01/19 20:50	1
Pyridine	ND	*	9.5	3.0	ug/L		10/16/19 19:34	11/01/19 20:50	1
Quinoline	ND		9.5	5.7	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/16/19 19:34	11/01/19 20:50	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 120*	*10/16/19 19:34*	*11/01/19 20:50*	*1*
2-Fluorophenol	*36*		*10 - 120*	*10/16/19 19:34*	*11/01/19 20:50*	*1*
Nitrobenzene-d5	*60*		*27 - 120*	*10/16/19 19:34*	*11/01/19 20:50*	*1*
Phenol-d5	*44*		*10 - 120*	*10/16/19 19:34*	*11/01/19 20:50*	*1*
Terphenyl-d14	*69*		*53 - 125*	*10/16/19 19:34*	*11/01/19 20:50*	*1*
2,4,6-Tribromophenol	*61*		*15 - 135*	*10/16/19 19:34*	*11/01/19 20:50*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/23/19 08:53	10/23/19 23:46	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/23/19 08:53	10/23/19 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*	*p*	*51 - 149*	*10/23/19 08:53*	*10/23/19 23:46*	*1*

Client Sample ID: P114R-ROX-100919

Lab Sample ID: 400-177791-6

Date Collected: 10/09/19 13:35
Date Received: 10/10/19 09:19

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			10/19/19 18:49	1
Acrolein	ND		20	10	ug/L			10/19/19 18:49	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 18:49	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 18:49	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 18:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 18:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 18:49	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 18:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 18:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 18:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 18:49	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 18:49	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 18:49	1
Chloromethane	ND	*	1.0	0.83	ug/L			10/19/19 18:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 18:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 18:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 18:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 18:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 18:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 18:49	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 18:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 18:49	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 18:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 18:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 18:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 18:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 18:49	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 18:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 18:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 18:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 18:49	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 18:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 18:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 18:49	1

Client Sample ID: P114R-ROX-100919

Lab Sample ID: 400-177791-6

Date Collected: 10/09/19 13:35
Date Received: 10/10/19 09:19

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			10/19/19 18:49	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 18:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 18:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 18:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 18:49	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 18:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 18:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 18:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 18:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 18:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 18:49	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 18:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 18:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 18:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 18:49	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 18:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 18:49	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/19/19 18:49*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/19/19 18:49*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/19/19 18:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
Anthracene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Benzo[a]pyrene	0.062	J	0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Chrysene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Fluoranthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
Fluorene	ND		0.19	0.020	ug/L		10/16/19 19:34	10/30/19 17:46	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		10/16/19 19:34	10/30/19 17:46	1
Phenanthrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
Pyrene	0.12	J	0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
1-Methylnaphthalene	0.041	J	0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*29*	*X*	*33 - 138*	*10/16/19 19:34*	*10/30/19 17:46*	*1*
2-Fluorobiphenyl	*62*		*15 - 122*	*10/16/19 19:34*	*10/30/19 17:46*	*1*

Client Sample ID: P114R-ROX-100919

Lab Sample ID: 400-177791-6

Date Collected: 10/09/19 13:35
Date Received: 10/10/19 09:19

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57		19 - 130	10/16/19 19:34	10/30/19 17:46	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		10/16/19 19:34	11/01/19 21:40	1
Benzenethiol	ND	*	9.7	1.7	ug/L		10/16/19 19:34	11/01/19 21:40	1
Benzoic acid	ND		29	7.1	ug/L		10/16/19 19:34	11/01/19 21:40	1
Benzyl alcohol	ND		9.7	1.9	ug/L		10/16/19 19:34	11/01/19 21:40	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		10/16/19 19:34	11/01/19 21:40	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		10/16/19 19:34	11/01/19 21:40	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		10/16/19 19:34	11/01/19 21:40	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		10/16/19 19:34	11/01/19 21:40	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		10/16/19 19:34	11/01/19 21:40	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		10/16/19 19:34	11/01/19 21:40	1
4-Chloroaniline	ND		9.7	3.3	ug/L		10/16/19 19:34	11/01/19 21:40	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		10/16/19 19:34	11/01/19 21:40	1
2-Chloronaphthalene	ND		9.7	0.51	ug/L		10/16/19 19:34	11/01/19 21:40	1
2-Chlorophenol	ND		9.7	2.1	ug/L		10/16/19 19:34	11/01/19 21:40	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		10/16/19 19:34	11/01/19 21:40	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		10/16/19 19:34	11/01/19 21:40	1
Dibenzofuran	ND		9.7	0.51	ug/L		10/16/19 19:34	11/01/19 21:40	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		10/16/19 19:34	11/01/19 21:40	1
Diethyl phthalate	ND		9.7	0.68	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		10/16/19 19:34	11/01/19 21:40	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		10/16/19 19:34	11/01/19 21:40	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		10/16/19 19:34	11/01/19 21:40	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.7	1.9	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		10/16/19 19:34	11/01/19 21:40	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		10/16/19 19:34	11/01/19 21:40	1
1,4-Dioxane	ND		9.7	0.97	ug/L		10/16/19 19:34	11/01/19 21:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		10/16/19 19:34	11/01/19 21:40	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		10/16/19 19:34	11/01/19 21:40	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/16/19 19:34	11/01/19 21:40	1
Hexachloroethane	ND		9.7	4.1	ug/L		10/16/19 19:34	11/01/19 21:40	1
Indene	ND		9.7	0.97	ug/L		10/16/19 19:34	11/01/19 21:40	1
Isophorone	ND		9.7	0.55	ug/L		10/16/19 19:34	11/01/19 21:40	1
2-Methylphenol	ND		9.7	1.8	ug/L		10/16/19 19:34	11/01/19 21:40	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/16/19 19:34	11/01/19 21:40	1
2-Nitroaniline	ND		9.7	2.1	ug/L		10/16/19 19:34	11/01/19 21:40	1
3-Nitroaniline	ND		9.7	1.8	ug/L		10/16/19 19:34	11/01/19 21:40	1
4-Nitroaniline	ND		9.7	2.4	ug/L		10/16/19 19:34	11/01/19 21:40	1
Nitrobenzene	ND		9.7	0.54	ug/L		10/16/19 19:34	11/01/19 21:40	1
2-Nitrophenol	ND		9.7	0.63	ug/L		10/16/19 19:34	11/01/19 21:40	1
4-Nitrophenol	ND		9.7	2.0	ug/L		10/16/19 19:34	11/01/19 21:40	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		10/16/19 19:34	11/01/19 21:40	1

Client Sample ID: P114R-ROX-100919
Date Collected: 10/09/19 13:35
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-6
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		10/16/19 19:34	11/01/19 21:40	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		10/16/19 19:34	11/01/19 21:40	1
Pentachlorophenol	ND		19	1.8	ug/L		10/16/19 19:34	11/01/19 21:40	1
Phenol	ND		9.7	2.5	ug/L		10/16/19 19:34	11/01/19 21:40	1
Pyridine	ND		9.7	3.1	ug/L		10/16/19 19:34	11/01/19 21:40	1
Quinoline	ND		9.7	5.8	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		10/16/19 19:34	11/01/19 21:40	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/16/19 19:34	11/01/19 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*34 - 120*	*10/16/19 19:34*	*11/01/19 21:40*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/16/19 19:34*	*11/01/19 21:40*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*10/16/19 19:34*	*11/01/19 21:40*	*1*
Phenol-d5	*54*		*10 - 120*	*10/16/19 19:34*	*11/01/19 21:40*	*1*
Terphenyl-d14	*57*		*53 - 125*	*10/16/19 19:34*	*11/01/19 21:40*	*1*
2,4,6-Tribromophenol	*78*		*15 - 135*	*10/16/19 19:34*	*11/01/19 21:40*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		10/23/19 08:53	10/24/19 00:09	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/23/19 08:53	10/24/19 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*	*p*	*51 - 149*	*10/23/19 08:53*	*10/24/19 00:09*	*1*

Definitions/Glossary

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

Job ID: 400-177791-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits

Glossary

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

Surrogate Summary

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

Job ID: 400-177791-1

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)
400-177791-1	TB-ROX-100919-8260	90	105	87
400-177791-3	MW26-ROX-100919-EB	94	106	86
400-177791-4	MW26-ROX-100919	93	105	86
400-177791-4 MS	MW26-ROX-100919	90	103	86
400-177791-4 MSD	MW26-ROX-100919	90	106	85
400-177791-5	MW13-ROX-100919	96	105	84
400-177791-6	P114R-ROX-100919	93	105	86
LCS 400-462264/1002	Lab Control Sample	91	106	85
MB 400-462264/4	Method Blank	93	106	87

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-177791-3	MW26-ROX-100919-EB	83	51	73	63	114	70
400-177791-4	MW26-ROX-100919	75	25	63	26	74	28
400-177791-4 MS	MW26-ROX-100919	97	45	85	54	82	62
400-177791-4 MSD	MW26-ROX-100919	92	50	87	60	94	69
400-177791-5	MW13-ROX-100919	81	36	60	44	69	61
400-177791-6	P114R-ROX-100919	88	51	69	54	57	78
LCS 400-461888/2-A	Lab Control Sample	90	88	82	102	105	135
LCS 400-461888/6-A	Lab Control Sample	171 X	62	95	18	187 X	155 X
LCSD 400-461888/3-A	Lab Control Sample Dup	79	96	73	99	90	117
LCSD 400-461888/7-A	Lab Control Sample Dup	100	70	103	29	125	96
MB 400-461888/1-A	Method Blank	115	69	89	55	106	104

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)
400-177791-3	MW26-ROX-100919-EB	87	72	72
400-177791-4	MW26-ROX-100919	65	69	64
400-177791-4 MS	MW26-ROX-100919	85	99	103
400-177791-4 MSD	MW26-ROX-100919	85	90	94

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-177791-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-177791-5	MW13-ROX-100919	40	53	51
400-177791-6	P114R-ROX-100919	29 X	62	57
LCS 400-461888/2-A	Lab Control Sample	120	108	103
LCSD 400-461888/3-A	Lab Control Sample Dup	91	83	81
MB 400-461888/1-A	Method Blank	116	85	92

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)
400-177791-2	TB-ROX-100919-8011	136 p
400-177791-3	MW26-ROX-100919-EB	140 p
400-177791-4	MW26-ROX-100919	145 p
400-177791-4 MS	MW26-ROX-100919	167 p X
400-177791-4 MSD	MW26-ROX-100919	164 p X
400-177791-5	MW13-ROX-100919	95 p
400-177791-6	P114R-ROX-100919	91 p
LCS 400-462775/2-A	Lab Control Sample	148
LCSD 400-462775/3-A	Lab Control Sample Dup	91
MB 400-462775/1-A	Method Blank	145

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177791-1

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: 400-177791-1

Client Sample ID: TB-ROX-100919-8260

Lab Sample ID: 400-177791-1
Matrix: Water

Date Collected: 10/09/19 00:00
Date Received: 10/10/19 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	462264	10/19/19 18:25	BSW	TAL PEN

Client Sample ID: TB-ROX-100919-8011

Lab Sample ID: 400-177791-2
Matrix: Water

Date Collected: 10/09/19 00:00
Date Received: 10/10/19 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			35.6 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:51	DS	TAL PEN

Client Sample ID: MW26-ROX-100919-EB

Lab Sample ID: 400-177791-3
Matrix: Water

Date Collected: 10/09/19 08:40
Date Received: 10/10/19 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	462264	10/19/19 20:25	BSW	TAL PEN
Total/NA	Prep	3520C			1054 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464866	11/06/19 16:00	VC1	TAL PEN
Total/NA	Prep	3520C			1054 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 19:10	VC1	TAL PEN
Total/NA	Prep	3520C			1054 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463847	10/30/19 16:26	PP1	TAL PEN
Total/NA	Prep	8011			36.2 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 22:14	DS	TAL PEN

Client Sample ID: MW26-ROX-100919

Lab Sample ID: 400-177791-4
Matrix: Water

Date Collected: 10/09/19 09:30
Date Received: 10/10/19 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	462264	10/19/19 16:48	BSW	TAL PEN
Total/NA	Prep	3520C			1044.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 19:35	VC1	TAL PEN
Total/NA	Prep	3520C			1044.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463847	10/30/19 16:42	PP1	TAL PEN
Total/NA	Prep	8011			36.8 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 22:37	DS	TAL PEN

Client Sample ID: MW13-ROX-100919

Lab Sample ID: 400-177791-5
Matrix: Water

Date Collected: 10/09/19 12:20
Date Received: 10/10/19 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	462264	10/19/19 20:49	BSW	TAL PEN

Client Sample ID: MW13-ROX-100919

Lab Sample ID: 400-177791-5

Date Collected: 10/09/19 12:20
Date Received: 10/10/19 09:19

Matrix: 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			1050.6 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 20:50	VC1	TAL PEN
Total/NA	Prep	3520C			1050.6 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463847	10/30/19 17:30	PP1	TAL PEN
Total/NA	Prep	8011			36.5 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 23:46	DS	TAL PEN

Client Sample ID: P114R-ROX-100919

Lab Sample ID: 400-177791-6

Date Collected: 10/09/19 13:35
Date Received: 10/10/19 09:19

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	462264	10/19/19 18:49	BSW	TAL PEN
Total/NA	Prep	3520C			1027.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 21:40	VC1	TAL PEN
Total/NA	Prep	3520C			1027.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463847	10/30/19 17:46	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 00:09	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-461888/1-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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 16:59	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D	RA	1			464142	11/01/19 15:24	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463963	10/31/19 18:12	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462264/4

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	462264	10/19/19 16:24	BSW	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462775/1-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 20:41	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-177791-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-461888/2-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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 17:20	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463847	10/30/19 14:20	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-461888/6-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 15:49	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462264/1002
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	462264	10/19/19 15:24	BSW	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462775/2-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:04	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-461888/3-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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 17:41	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463847	10/30/19 14:36	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-461888/7-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 16:13	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177791-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462775/3-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:28	DS	TAL PEN

Client Sample ID: MW26-ROX-100919

Lab Sample ID: 400-177791-4 MS

Date Collected: 10/09/19 09:30
Date Received: 10/10/19 09:19

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	462264	10/19/19 17:12	BSW	TAL PEN
Total/NA	Prep	3520C			1044.6 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 20:00	VC1	TAL PEN
Total/NA	Prep	3520C			1044.6 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463847	10/30/19 16:58	PP1	TAL PEN
Total/NA	Prep	8011			36.4 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 23:00	DS	TAL PEN

Client Sample ID: MW26-ROX-100919

Lab Sample ID: 400-177791-4 MSD

Date Collected: 10/09/19 09:30
Date Received: 10/10/19 09:19

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	462264	10/19/19 17:36	BSW	TAL PEN
Total/NA	Prep	3520C			1052.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464142	11/01/19 20:25	VC1	TAL PEN
Total/NA	Prep	3520C			1052.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463847	10/30/19 17:14	PP1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 23:23	DS	TAL PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-177791-1

GC/MS VOA

Analysis Batch: 462264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-1	TB-ROX-100919-8260	Total/NA	Water	8260B	
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	8260B	
400-177791-4	MW26-ROX-100919	Total/NA	Water	8260B	
400-177791-5	MW13-ROX-100919	Total/NA	Water	8260B	
400-177791-6	P114R-ROX-100919	Total/NA	Water	8260B	
MB 400-462264/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462264/1002	Lab Control Sample	Total/NA	Water	8260B	
400-177791-4 MS	MW26-ROX-100919	Total/NA	Water	8260B	
400-177791-4 MSD	MW26-ROX-100919	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 461888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	3520C	
400-177791-4	MW26-ROX-100919	Total/NA	Water	3520C	
400-177791-5	MW13-ROX-100919	Total/NA	Water	3520C	
400-177791-6	P114R-ROX-100919	Total/NA	Water	3520C	
MB 400-461888/1-A	Method Blank	Total/NA	Water	3520C	
MB 400-461888/1-A - RA	Method Blank	Total/NA	Water	3520C	
LCS 400-461888/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-461888/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-461888/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-461888/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-177791-4 MS	MW26-ROX-100919	Total/NA	Water	3520C	
400-177791-4 MSD	MW26-ROX-100919	Total/NA	Water	3520C	

Analysis Batch: 463847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	8270D LL	461888
400-177791-4	MW26-ROX-100919	Total/NA	Water	8270D LL	461888
400-177791-5	MW13-ROX-100919	Total/NA	Water	8270D LL	461888
400-177791-6	P114R-ROX-100919	Total/NA	Water	8270D LL	461888
LCS 400-461888/2-A	Lab Control Sample	Total/NA	Water	8270D LL	461888
LCSD 400-461888/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	461888
400-177791-4 MS	MW26-ROX-100919	Total/NA	Water	8270D LL	461888
400-177791-4 MSD	MW26-ROX-100919	Total/NA	Water	8270D LL	461888

Analysis Batch: 463963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461888/1-A	Method Blank	Total/NA	Water	8270D LL	461888

Analysis Batch: 464020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461888/1-A	Method Blank	Total/NA	Water	8270D	461888
LCS 400-461888/2-A	Lab Control Sample	Total/NA	Water	8270D	461888
LCSD 400-461888/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	461888

Analysis Batch: 464142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	8270D	461888

GC/MS Semi VOA (Continued)

Analysis Batch: 464142 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-4	MW26-ROX-100919	Total/NA	Water	8270D	461888
400-177791-5	MW13-ROX-100919	Total/NA	Water	8270D	461888
400-177791-6	P114R-ROX-100919	Total/NA	Water	8270D	461888
MB 400-461888/1-A - RA	Method Blank	Total/NA	Water	8270D	461888
LCS 400-461888/6-A	Lab Control Sample	Total/NA	Water	8270D	461888
LCSD 400-461888/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	461888
400-177791-4 MS	MW26-ROX-100919	Total/NA	Water	8270D	461888
400-177791-4 MSD	MW26-ROX-100919	Total/NA	Water	8270D	461888

Analysis Batch: 464866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	8270D	461888

GC Semi VOA

Prep Batch: 462775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-2	TB-ROX-100919-8011	Total/NA	Water	8011	
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	8011	
400-177791-4	MW26-ROX-100919	Total/NA	Water	8011	
400-177791-5	MW13-ROX-100919	Total/NA	Water	8011	
400-177791-6	P114R-ROX-100919	Total/NA	Water	8011	
MB 400-462775/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462775/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462775/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-177791-4 MS	MW26-ROX-100919	Total/NA	Water	8011	
400-177791-4 MSD	MW26-ROX-100919	Total/NA	Water	8011	

Analysis Batch: 462889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-2	TB-ROX-100919-8011	Total/NA	Water	8011	462775
400-177791-3	MW26-ROX-100919-EB	Total/NA	Water	8011	462775
400-177791-4	MW26-ROX-100919	Total/NA	Water	8011	462775
400-177791-5	MW13-ROX-100919	Total/NA	Water	8011	462775
400-177791-6	P114R-ROX-100919	Total/NA	Water	8011	462775
MB 400-462775/1-A	Method Blank	Total/NA	Water	8011	462775
LCS 400-462775/2-A	Lab Control Sample	Total/NA	Water	8011	462775
LCSD 400-462775/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462775
400-177791-4 MS	MW26-ROX-100919	Total/NA	Water	8011	462775
400-177791-4 MSD	MW26-ROX-100919	Total/NA	Water	8011	462775

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

Lab Sample ID: MB 400-462264/4
Matrix: Water
Analysis Batch: 462264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/19/19 16:24	1
Acrolein	ND		20	10	ug/L			10/19/19 16:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/19/19 16:24	1
Benzene	ND		1.0	0.38	ug/L			10/19/19 16:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/19/19 16:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/19/19 16:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Bromoform	ND		5.0	0.71	ug/L			10/19/19 16:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/19/19 16:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/19/19 16:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/19/19 16:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/19/19 16:24	1
Chloroform	ND		1.0	0.60	ug/L			10/19/19 16:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/19/19 16:24	1
Chloromethane	ND		1.0	0.83	ug/L			10/19/19 16:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 16:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/19/19 16:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/19/19 16:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/19/19 16:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/19/19 16:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/19/19 16:24	1
2-Hexanone	ND		25	3.1	ug/L			10/19/19 16:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/19/19 16:24	1
Methylene bromide	ND		5.0	0.59	ug/L			10/19/19 16:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/19/19 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/19/19 16:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/19/19 16:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/19/19 16:24	1
Naphthalene	ND		1.0	1.0	ug/L			10/19/19 16:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/19/19 16:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/19/19 16:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/19/19 16:24	1
o-Xylene	ND		5.0	0.60	ug/L			10/19/19 16:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/19/19 16:24	1

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

Lab Sample ID: MB 400-462264/4
Matrix: Water
Analysis Batch: 462264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/19/19 16:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/19/19 16:24	1
Styrene	ND		1.0	1.0	ug/L			10/19/19 16:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/19/19 16:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/19/19 16:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/19/19 16:24	1
Toluene	ND		1.0	0.41	ug/L			10/19/19 16:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/19/19 16:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/19/19 16:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/19/19 16:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/19/19 16:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/19/19 16:24	1
Trichloroethene	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/19/19 16:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/19/19 16:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/19/19 16:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/19/19 16:24	1
Vinyl acetate	ND		25	2.0	ug/L			10/19/19 16:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/19/19 16:24	1
Xylenes, Total	ND		10	1.6	ug/L			10/19/19 16:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/19/19 16:24*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/19/19 16:24*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/19/19 16:24*	*1*

Lab Sample ID: LCS 400-462264/1002
Matrix: Water
Analysis Batch: 462264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	229		ug/L		114	43 - 160
Acrolein	500	661		ug/L		132	38 - 160
Acrylonitrile	500	626		ug/L		125	64 - 142
Benzene	50.0	53.0		ug/L		106	70 - 130
Bromobenzene	50.0	40.9		ug/L		82	70 - 132
Bromochloromethane	50.0	52.5		ug/L		105	70 - 130
Bromodichloromethane	50.0	51.3		ug/L		103	67 - 133
Bromoform	50.0	41.6		ug/L		83	57 - 140
Bromomethane	50.0	70.2		ug/L		140	10 - 160
2-Butanone (MEK)	200	216		ug/L		108	61 - 145
Carbon disulfide	50.0	52.4		ug/L		105	61 - 137
Carbon tetrachloride	50.0	50.2		ug/L		100	61 - 137
Chlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dibromochloromethane	50.0	44.6		ug/L		89	67 - 135
Chloroethane	50.0	59.8		ug/L		120	55 - 141

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

Lab Sample ID: LCS 400-462264/1002
Matrix: Water
Analysis Batch: 462264

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	20.0		ug/L		40	10 - 160
Chloroform	50.0	53.6		ug/L		107	69 - 130
1-Chlorohexane	50.0	61.4		ug/L		123	69 - 130
Chloromethane	50.0	72.5	*	ug/L		145	58 - 137
cis-1,2-Dichloroethene	50.0	57.6		ug/L		115	68 - 130
cis-1,3-Dichloropropene	50.0	51.3		ug/L		103	69 - 132
1,2-Dichlorobenzene	50.0	41.5		ug/L		83	67 - 130
1,3-Dichlorobenzene	50.0	41.6		ug/L		83	70 - 130
1,4-Dichlorobenzene	50.0	41.0		ug/L		82	70 - 130
Dichlorodifluoromethane	50.0	52.5		ug/L		105	41 - 146
1,1-Dichloroethane	50.0	58.0		ug/L		116	70 - 130
1,2-Dichloroethane	50.0	59.5		ug/L		119	69 - 130
1,1-Dichloroethene	50.0	41.9		ug/L		84	63 - 134
1,2-Dichloropropane	50.0	59.3		ug/L		119	70 - 130
1,3-Dichloropropane	50.0	48.3		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	48.7		ug/L		97	52 - 135
1,1-Dichloropropene	50.0	53.8		ug/L		108	70 - 130
Ethylbenzene	50.0	46.3		ug/L		93	70 - 130
Ethyl methacrylate	50.0	45.5		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	48.3		ug/L		97	53 - 140
2-Hexanone	200	216		ug/L		108	65 - 137
Isopropylbenzene	50.0	46.2		ug/L		92	70 - 130
Methylene bromide	50.0	49.7		ug/L		99	70 - 130
Methylene Chloride	50.0	52.0		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	241		ug/L		121	69 - 138
Methyl tert-butyl ether	50.0	52.5		ug/L		105	66 - 130
m-Xylene & p-Xylene	50.0	46.2		ug/L		92	70 - 130
Naphthalene	50.0	40.4		ug/L		81	47 - 149
n-Butylbenzene	50.0	42.5		ug/L		85	67 - 130
N-Propylbenzene	50.0	38.6		ug/L		77	70 - 130
o-Chlorotoluene	50.0	40.5		ug/L		81	70 - 130
o-Xylene	50.0	45.9		ug/L		92	70 - 130
p-Chlorotoluene	50.0	41.1		ug/L		82	70 - 130
p-Isopropyltoluene	50.0	42.2		ug/L		84	65 - 130
sec-Butylbenzene	50.0	40.2		ug/L		80	66 - 130
Styrene	50.0	42.0		ug/L		84	70 - 130
tert-Butylbenzene	50.0	39.9		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.5		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	39.8		ug/L		80	70 - 131
Tetrachloroethene	50.0	47.6		ug/L		95	65 - 130
Toluene	50.0	43.5		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	52.3		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	44.3		ug/L		89	63 - 130
1,2,3-Trichlorobenzene	50.0	47.9		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	48.5		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	52.5		ug/L		105	68 - 130
1,1,2-Trichloroethane	50.0	45.0		ug/L		90	70 - 130
Trichloroethene	50.0	53.6		ug/L		107	70 - 130
Trichlorofluoromethane	50.0	43.2		ug/L		86	65 - 138

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

Lab Sample ID: LCS 400-462264/1002
Matrix: Water
Analysis Batch: 462264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	38.4		ug/L		77	70 - 130
1,2,4-Trimethylbenzene	50.0	39.3		ug/L		79	70 - 130
1,3,5-Trimethylbenzene	50.0	38.9		ug/L		78	69 - 130
Vinyl acetate	100	118		ug/L		118	26 - 160
Vinyl chloride	50.0	55.8		ug/L		112	59 - 136
Xylenes, Total	100	92.1		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*85*		*80 - 120*

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 462264

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F1	200	82.6	F1	ug/L		41	43 - 150
Acrolein	ND		500	665		ug/L		133	38 - 150
Acrylonitrile	ND		500	606		ug/L		121	62 - 149
Benzene	ND		50.0	56.2		ug/L		112	56 - 142
Bromobenzene	ND		50.0	44.8		ug/L		90	59 - 136
Bromochloromethane	ND		50.0	54.9		ug/L		110	64 - 140
Bromodichloromethane	ND		50.0	53.0		ug/L		106	59 - 143
Bromoform	ND		50.0	43.2		ug/L		86	50 - 140
Bromomethane	ND		50.0	66.0		ug/L		132	10 - 150
2-Butanone (MEK)	ND	F1	200	106	F1	ug/L		53	55 - 150
Carbon disulfide	ND		50.0	52.1		ug/L		104	48 - 150
Carbon tetrachloride	ND		50.0	54.8		ug/L		110	55 - 145
Chlorobenzene	ND		50.0	47.8		ug/L		96	64 - 130
Dibromochloromethane	ND		50.0	46.2		ug/L		92	56 - 143
Chloroethane	ND		50.0	66.4		ug/L		133	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	3.41	J F1	ug/L		7	10 - 150
Chloroform	ND		50.0	56.4		ug/L		113	60 - 141
1-Chlorohexane	ND		50.0	63.5		ug/L		127	56 - 136
Chloromethane	ND	*	50.0	72.5		ug/L		145	49 - 148
cis-1,2-Dichloroethene	ND		50.0	59.4		ug/L		119	59 - 143
cis-1,3-Dichloropropene	ND		50.0	52.4		ug/L		105	57 - 140
1,2-Dichlorobenzene	ND		50.0	43.0		ug/L		86	52 - 137
1,3-Dichlorobenzene	ND		50.0	44.3		ug/L		89	54 - 135
1,4-Dichlorobenzene	ND		50.0	43.3		ug/L		87	53 - 135
Dichlorodifluoromethane	ND		50.0	51.3		ug/L		103	16 - 150
1,1-Dichloroethane	ND		50.0	60.2		ug/L		120	61 - 144
1,2-Dichloroethane	ND		50.0	61.1		ug/L		122	60 - 141
1,1-Dichloroethene	ND		50.0	44.9		ug/L		90	54 - 147
1,2-Dichloropropane	ND		50.0	62.4		ug/L		125	66 - 137
1,3-Dichloropropane	ND		50.0	48.6		ug/L		97	66 - 133
2,2-Dichloropropane	ND		50.0	50.0		ug/L		100	42 - 144

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

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 462264

Client Sample ID: MW26-ROX-100919
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	56.7		ug/L		113	65 - 136
Ethylbenzene	ND		50.0	49.1		ug/L		98	58 - 131
Ethyl methacrylate	ND		50.0	46.2		ug/L		92	64 - 130
Hexachlorobutadiene	ND		50.0	51.3		ug/L		103	31 - 149
2-Hexanone	ND	F1	200	115	F1	ug/L		57	65 - 140
Isopropylbenzene	ND		50.0	49.0		ug/L		98	56 - 133
Methylene bromide	ND		50.0	52.7		ug/L		105	63 - 138
Methylene Chloride	ND		50.0	55.2		ug/L		110	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	211		ug/L		105	63 - 146
Methyl tert-butyl ether	ND		50.0	52.3		ug/L		105	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.2		ug/L		98	57 - 130
Naphthalene	ND		50.0	38.9		ug/L		78	25 - 150
n-Butylbenzene	ND		50.0	44.4		ug/L		89	41 - 142
N-Propylbenzene	ND		50.0	41.8		ug/L		84	51 - 138
o-Chlorotoluene	ND		50.0	43.3		ug/L		87	53 - 134
o-Xylene	ND		50.0	47.9		ug/L		96	61 - 130
p-Chlorotoluene	ND		50.0	44.4		ug/L		89	54 - 133
p-Isopropyltoluene	ND		50.0	43.8		ug/L		88	48 - 139
sec-Butylbenzene	ND		50.0	43.4		ug/L		87	50 - 138
Styrene	ND		50.0	44.7		ug/L		89	58 - 131
tert-Butylbenzene	ND		50.0	42.5		ug/L		85	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	47.6		ug/L		95	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	40.5		ug/L		81	66 - 135
Tetrachloroethene	ND		50.0	48.7		ug/L		97	52 - 133
Toluene	ND		50.0	45.4		ug/L		91	65 - 130
trans-1,2-Dichloroethene	ND		50.0	55.1		ug/L		110	61 - 143
trans-1,3-Dichloropropene	ND		50.0	45.3		ug/L		91	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	48.1		ug/L		96	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	48.9		ug/L		98	39 - 148
1,1,1-Trichloroethane	ND		50.0	55.0		ug/L		110	57 - 142
1,1,2-Trichloroethane	ND		50.0	46.2		ug/L		92	66 - 131
Trichloroethene	ND		50.0	56.7		ug/L		113	64 - 136
Trichlorofluoromethane	ND		50.0	45.6		ug/L		91	54 - 150
1,2,3-Trichloropropane	ND		50.0	38.9		ug/L		78	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	42.6		ug/L		85	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	42.1		ug/L		84	52 - 135
Vinyl acetate	ND		100	120		ug/L		120	26 - 150
Vinyl chloride	ND		50.0	56.5		ug/L		113	46 - 150
Xylenes, Total	ND		100	97.1		ug/L		97	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*86*		*80 - 120*

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

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 462264

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F1	200	85.5		ug/L		43	43 - 150	3	30
Acrolein	ND		500	704		ug/L		141	38 - 150	6	31
Acrylonitrile	ND		500	658		ug/L		132	62 - 149	8	30
Benzene	ND		50.0	56.2		ug/L		112	56 - 142	0	30
Bromobenzene	ND		50.0	43.5		ug/L		87	59 - 136	3	30
Bromochloromethane	ND		50.0	54.7		ug/L		109	64 - 140	0	30
Bromodichloromethane	ND		50.0	52.7		ug/L		105	59 - 143	1	30
Bromoform	ND		50.0	44.2		ug/L		88	50 - 140	2	30
Bromomethane	ND		50.0	65.6		ug/L		131	10 - 150	1	50
2-Butanone (MEK)	ND	F1	200	119		ug/L		60	55 - 150	11	30
Carbon disulfide	ND		50.0	51.1		ug/L		102	48 - 150	2	30
Carbon tetrachloride	ND		50.0	52.9		ug/L		106	55 - 145	3	30
Chlorobenzene	ND		50.0	47.3		ug/L		95	64 - 130	1	30
Dibromochloromethane	ND		50.0	47.4		ug/L		95	56 - 143	2	30
Chloroethane	ND		50.0	67.2		ug/L		134	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	56.2		ug/L		112	60 - 141	0	30
1-Chlorohexane	ND		50.0	62.4		ug/L		125	56 - 136	2	30
Chloromethane	ND	*	50.0	72.6		ug/L		145	49 - 148	0	31
cis-1,2-Dichloroethene	ND		50.0	60.3		ug/L		121	59 - 143	1	30
cis-1,3-Dichloropropene	ND		50.0	53.0		ug/L		106	57 - 140	1	30
1,2-Dichlorobenzene	ND		50.0	43.4		ug/L		87	52 - 137	1	30
1,3-Dichlorobenzene	ND		50.0	43.7		ug/L		87	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	43.2		ug/L		86	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	53.8		ug/L		108	16 - 150	5	31
1,1-Dichloroethane	ND		50.0	61.2		ug/L		122	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	63.6		ug/L		127	60 - 141	4	30
1,1-Dichloroethene	ND		50.0	43.8		ug/L		88	54 - 147	2	30
1,2-Dichloropropane	ND		50.0	64.0		ug/L		128	66 - 137	3	30
1,3-Dichloropropane	ND		50.0	50.6		ug/L		101	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	49.9		ug/L		100	42 - 144	0	31
1,1-Dichloropropene	ND		50.0	55.8		ug/L		112	65 - 136	2	30
Ethylbenzene	ND		50.0	48.0		ug/L		96	58 - 131	2	30
Ethyl methacrylate	ND		50.0	49.9		ug/L		100	64 - 130	8	30
Hexachlorobutadiene	ND		50.0	49.1		ug/L		98	31 - 149	4	36
2-Hexanone	ND	F1	200	130		ug/L		65	65 - 140	13	30
Isopropylbenzene	ND		50.0	47.8		ug/L		96	56 - 133	3	30
Methylene bromide	ND		50.0	54.0		ug/L		108	63 - 138	3	30
Methylene Chloride	ND		50.0	55.9		ug/L		112	60 - 146	1	32
4-Methyl-2-pentanone (MIBK)	ND		200	237		ug/L		119	63 - 146	12	30
Methyl tert-butyl ether	ND		50.0	55.0		ug/L		110	59 - 137	5	30
m-Xylene & p-Xylene	ND		50.0	48.3		ug/L		97	57 - 130	2	30
Naphthalene	ND		50.0	41.6		ug/L		83	25 - 150	7	30
n-Butylbenzene	ND		50.0	43.3		ug/L		87	41 - 142	3	31
N-Propylbenzene	ND		50.0	40.0		ug/L		80	51 - 138	4	30
o-Chlorotoluene	ND		50.0	42.3		ug/L		85	53 - 134	2	30
o-Xylene	ND		50.0	47.7		ug/L		95	61 - 130	0	30
p-Chlorotoluene	ND		50.0	42.4		ug/L		85	54 - 133	4	30

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

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 462264

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	42.9		ug/L		86	48 - 139	2	30
sec-Butylbenzene	ND		50.0	41.7		ug/L		83	50 - 138	4	30
Styrene	ND		50.0	43.7		ug/L		87	58 - 131	2	30
tert-Butylbenzene	ND		50.0	41.0		ug/L		82	54 - 146	4	30
1,1,1,2-Tetrachloroethane	ND		50.0	48.4		ug/L		97	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	43.2		ug/L		86	66 - 135	6	30
Tetrachloroethene	ND		50.0	46.4		ug/L		93	52 - 133	5	30
Toluene	ND		50.0	46.1		ug/L		92	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	54.1		ug/L		108	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	47.7		ug/L		95	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	49.2		ug/L		98	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	49.4		ug/L		99	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	54.7		ug/L		109	57 - 142	0	30
1,1,2-Trichloroethane	ND		50.0	48.6		ug/L		97	66 - 131	5	30
Trichloroethene	ND		50.0	55.9		ug/L		112	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	44.8		ug/L		90	54 - 150	2	30
1,2,3-Trichloropropane	ND		50.0	41.8		ug/L		84	65 - 133	7	30
1,2,4-Trimethylbenzene	ND		50.0	41.4		ug/L		83	50 - 139	3	30
1,3,5-Trimethylbenzene	ND		50.0	40.5		ug/L		81	52 - 135	4	30
Vinyl acetate	ND		100	124		ug/L		124	26 - 150	3	33
Vinyl chloride	ND		50.0	56.0		ug/L		112	46 - 150	1	30
Xylenes, Total	ND		100	95.9		ug/L		96	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*85*		*80 - 120*

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
Benzoic acid	ND		30	7.3	ug/L		10/16/19 19:34	10/31/19 16:59	1
Benzyl alcohol	ND		10	2.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/16/19 19:34	10/31/19 16:59	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/16/19 19:34	10/31/19 16:59	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/16/19 19:34	10/31/19 16:59	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/16/19 19:34	10/31/19 16:59	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Chloroaniline	ND		10	3.4	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Chlorophenol	ND		10	2.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/16/19 19:34	10/31/19 16:59	1

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Dibenzofuran	ND		10	0.52	ug/L		10/16/19 19:34	10/31/19 16:59	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Diethyl phthalate	ND		10	0.70	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/16/19 19:34	10/31/19 16:59	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/16/19 19:34	10/31/19 16:59	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/16/19 19:34	10/31/19 16:59	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/16/19 19:34	10/31/19 16:59	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/16/19 19:34	10/31/19 16:59	1
1,4-Dioxane	ND		10	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/16/19 19:34	10/31/19 16:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/16/19 19:34	10/31/19 16:59	1
Hexachloroethane	ND		10	4.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
Indene	ND		10	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Isophorone	ND		10	0.57	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Methylphenol	ND		10	1.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Nitroaniline	ND		10	2.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
3-Nitroaniline	ND		10	1.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Nitroaniline	ND		10	2.5	ug/L		10/16/19 19:34	10/31/19 16:59	1
Nitrobenzene	ND		10	0.55	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Nitrophenol	ND		10	0.65	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Nitrophenol	ND		10	2.1	ug/L		10/16/19 19:34	10/31/19 16:59	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/16/19 19:34	10/31/19 16:59	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/16/19 19:34	10/31/19 16:59	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/16/19 19:34	10/31/19 16:59	1
Pentachlorophenol	ND		20	1.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
Phenol	ND		10	2.6	ug/L		10/16/19 19:34	10/31/19 16:59	1
Pyridine	ND		10	3.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
Quinoline	ND		10	6.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/16/19 19:34	10/31/19 16:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*115*		*34 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
2-Fluorophenol	*69*		*10 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
Nitrobenzene-d5	*89*		*27 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
Phenol-d5	*55*		*10 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
Terphenyl-d14	*106*		*53 - 125*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
2,4,6-Tribromophenol	*104*		*15 - 135*	*10/16/19 19:34*	*10/31/19 16:59*	*1*

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

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	32.9		ug/L		110	29 - 120
Benzoic acid	117	14.2	J	ug/L		12	10 - 150
Benzyl alcohol	30.0	28.5		ug/L		95	19 - 125
Bis(2-chloroethoxy)methane	30.0	22.3		ug/L		74	45 - 120
Bis(2-chloroethyl)ether	30.0	24.2		ug/L		81	48 - 120
bis (2-chloroisopropyl) ether	30.0	21.4		ug/L		71	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.4		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	33.1		ug/L		110	55 - 122
Butyl benzyl phthalate	30.0	30.1		ug/L		100	46 - 145
4-Chloroaniline	30.0	20.9		ug/L		70	30 - 120
4-Chloro-3-methylphenol	30.0	28.7		ug/L		96	39 - 140
2-Chloronaphthalene	30.0	28.1		ug/L		94	52 - 120
2-Chlorophenol	30.0	28.7		ug/L		96	34 - 120
4-Chlorophenyl phenyl ether	30.0	30.1		ug/L		100	58 - 124
Dibenz[a,h]acridine	30.0	31.9		ug/L		106	46 - 149
Dibenzofuran	30.0	28.4		ug/L		95	58 - 123
3,3'-Dichlorobenzidine	40.0	56.6	*	ug/L		142	39 - 135
2,4-Dichlorophenol	30.0	27.0		ug/L		90	39 - 128
Diethyl phthalate	30.0	28.0		ug/L		93	44 - 146
2,4-Dimethylphenol	30.0	24.5		ug/L		82	44 - 120
Dimethyl phthalate	30.0	27.8		ug/L		93	50 - 131
Di-n-butyl phthalate	30.0	28.1		ug/L		94	55 - 131
4,6-Dinitro-ortho-cresol	60.0	61.2		ug/L		102	10 - 150
2,4-Dinitrophenol	60.0	53.1		ug/L		89	10 - 150
2,4-Dinitrotoluene	30.0	30.3		ug/L		101	58 - 140
2,6-Dinitrotoluene	30.0	30.5		ug/L		102	57 - 130
Di-n-octyl phthalate	30.0	31.8		ug/L		106	50 - 150
1,4-Dioxane	30.0	14.6		ug/L		49	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	22.9		ug/L		76	47 - 123
Hexachlorobenzene	30.0	34.3		ug/L		114	52 - 131
Hexachlorocyclopentadiene	30.0	27.0		ug/L		90	10 - 129
Hexachloroethane	30.0	20.6		ug/L		69	41 - 120
Indene	30.0	23.4		ug/L		78	47 - 120
Isophorone	30.0	22.5		ug/L		75	49 - 120
2-Methylphenol	30.0	26.6		ug/L		89	39 - 123
3 & 4 Methylphenol	30.0	21.9		ug/L		73	38 - 121
2-Nitroaniline	30.0	26.0		ug/L		87	47 - 150
3-Nitroaniline	30.0	28.7		ug/L		96	34 - 132
4-Nitroaniline	30.0	33.2		ug/L		111	41 - 135
Nitrobenzene	30.0	22.1		ug/L		74	47 - 120
2-Nitrophenol	30.0	28.2		ug/L		94	28 - 136
4-Nitrophenol	60.0	59.0		ug/L		98	10 - 150
N-Nitrosodimethylamine	30.0	28.5		ug/L		95	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.4		ug/L		65	44 - 120
N-Nitrosodiphenylamine	29.8	29.0		ug/L		97	56 - 120
Pentachlorophenol	60.0	63.0		ug/L		105	15 - 141
Phenol	30.0	28.1		ug/L		94	33 - 120
Pyridine	60.0	47.7		ug/L		80	26 - 120

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

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	29.0		ug/L		97	51 - 129
2,4,5-Trichlorophenol	30.0	33.2		ug/L		111	38 - 147
2,4,6-Trichlorophenol	30.0	32.0		ug/L		107	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*34 - 120*
2-Fluorophenol	*88*		*10 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Phenol-d5	*102*		*10 - 120*
Terphenyl-d14	*105*		*53 - 125*
2,4,6-Tribromophenol	*135*		*15 - 135*

Lab Sample ID: LCS 400-461888/6-A
Matrix: Water
Analysis Batch: 464142

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	12.1		ug/L		40	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*171*	*X*	*34 - 120*
2-Fluorophenol	*62*		*10 - 120*
Nitrobenzene-d5	*95*		*27 - 120*
Phenol-d5	*18*		*10 - 120*
Terphenyl-d14	*187*	*X*	*53 - 125*
2,4,6-Tribromophenol	*155*	*X*	*15 - 135*

Lab Sample ID: LCSD 400-461888/3-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	28.8		ug/L		96	29 - 120	13	30
Benzoic acid	117	82.7	*	ug/L		71	10 - 150	141	30
Benzyl alcohol	30.0	23.8		ug/L		79	19 - 125	18	30
Bis(2-chloroethoxy)methane	30.0	19.5		ug/L		65	45 - 120	13	30
Bis(2-chloroethyl)ether	30.0	23.5		ug/L		78	48 - 120	3	30
bis (2-chloroisopropyl) ether	30.0	18.5		ug/L		62	30 - 125	14	30
Bis(2-ethylhexyl) phthalate	30.0	23.5		ug/L		78	48 - 150	12	30
4-Bromophenyl phenyl ether	30.0	29.4		ug/L		98	55 - 122	12	30
Butyl benzyl phthalate	30.0	26.4		ug/L		88	46 - 145	13	30
4-Chloroaniline	30.0	18.9		ug/L		63	30 - 120	10	30
4-Chloro-3-methylphenol	30.0	24.9		ug/L		83	39 - 140	14	30
2-Chloronaphthalene	30.0	25.2		ug/L		84	52 - 120	11	30
2-Chlorophenol	30.0	25.6		ug/L		85	34 - 120	11	30
4-Chlorophenyl phenyl ether	30.0	26.5		ug/L		88	58 - 124	13	30
Dibenz[a,h]acridine	30.0	24.7		ug/L		82	46 - 149	26	30
Dibenzofuran	30.0	25.6		ug/L		85	58 - 123	10	30

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

Lab Sample ID: LCSD 400-461888/3-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	50.3		ug/L		126	39 - 135	12	30
2,4-Dichlorophenol	30.0	24.1		ug/L		80	39 - 128	11	30
Diethyl phthalate	30.0	25.2		ug/L		84	44 - 146	10	30
2,4-Dimethylphenol	30.0	22.0		ug/L		73	44 - 120	11	30
Dimethyl phthalate	30.0	25.0		ug/L		83	50 - 131	11	30
Di-n-butyl phthalate	30.0	25.1		ug/L		84	55 - 131	11	30
4,6-Dinitro-ortho-cresol	60.0	62.5		ug/L		104	10 - 150	2	30
2,4-Dinitrophenol	60.0	67.5		ug/L		113	10 - 150	24	30
2,4-Dinitrotoluene	30.0	27.2		ug/L		91	58 - 140	11	30
2,6-Dinitrotoluene	30.0	27.2		ug/L		91	57 - 130	11	30
Di-n-octyl phthalate	30.0	29.4		ug/L		98	50 - 150	8	30
1,4-Dioxane	30.0	14.6		ug/L		49	25 - 120	0	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.4		ug/L		68	47 - 123	11	30
Hexachlorobenzene	30.0	30.2		ug/L		101	52 - 131	13	30
Hexachlorocyclopentadiene	30.0	20.5		ug/L		68	10 - 129	28	30
Hexachloroethane	30.0	22.0		ug/L		73	41 - 120	7	30
Indene	30.0	24.4		ug/L		81	47 - 120	4	30
Isophorone	30.0	20.5		ug/L		68	49 - 120	9	30
2-Methylphenol	30.0	24.1		ug/L		80	39 - 123	10	30
3 & 4 Methylphenol	30.0	23.1		ug/L		77	38 - 121	5	30
2-Nitroaniline	30.0	22.7		ug/L		76	47 - 150	14	30
3-Nitroaniline	30.0	26.0		ug/L		87	34 - 132	10	30
4-Nitroaniline	30.0	30.2		ug/L		101	41 - 135	9	30
Nitrobenzene	30.0	19.7		ug/L		66	47 - 120	12	30
2-Nitrophenol	30.0	25.5		ug/L		85	28 - 136	10	30
4-Nitrophenol	60.0	51.3		ug/L		86	10 - 150	14	30
N-Nitrosodimethylamine	30.0	18.8	*	ug/L		63	22 - 148	41	30
N-Nitrosodi-n-propylamine	30.0	20.7		ug/L		69	44 - 120	6	30
N-Nitrosodiphenylamine	29.8	25.5		ug/L		86	56 - 120	13	30
Pentachlorophenol	60.0	55.8		ug/L		93	15 - 141	12	30
Phenol	30.0	26.8		ug/L		89	33 - 120	4	30
Pyridine	60.0	31.6	*	ug/L		53	26 - 120	41	30
Quinoline	30.0	24.4		ug/L		81	51 - 129	17	30
2,4,5-Trichlorophenol	30.0	28.8		ug/L		96	38 - 147	14	30
2,4,6-Trichlorophenol	30.0	28.4		ug/L		95	36 - 139	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*34 - 120*
2-Fluorophenol	*96*		*10 - 120*
Nitrobenzene-d5	*73*		*27 - 120*
Phenol-d5	*99*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*117*		*15 - 135*

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

Lab Sample ID: LCSD 400-461888/7-A
Matrix: Water
Analysis Batch: 464142

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	8.14	J *	ug/L		27	10 - 120	39	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*34 - 120*
2-Fluorophenol	*70*		*10 - 120*
Nitrobenzene-d5	*103*		*27 - 120*
Phenol-d5	*29*		*10 - 120*
Terphenyl-d14	*125*		*53 - 125*
2,4,6-Tribromophenol	*96*		*15 - 135*

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 464142

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		28.7	12.8		ug/L		45	10 - 143
Benzoic acid	ND	*	112	89.4		ug/L		80	10 - 134
Benzyl alcohol	ND		28.7	10.9		ug/L		38	10 - 154
Bis(2-chloroethoxy)methane	ND		28.7	26.3		ug/L		92	14 - 147
Bis(2-chloroethyl)ether	ND	F1	28.7	38.6	F1	ug/L		134	28 - 130
bis (2-chloroisopropyl) ether	ND		28.7	29.1		ug/L		101	10 - 141
Bis(2-ethylhexyl) phthalate	6.8	J	28.7	27.8		ug/L		73	43 - 160
4-Bromophenyl phenyl ether	ND		28.7	26.6		ug/L		93	26 - 159
Butyl benzyl phthalate	ND		28.7	29.4		ug/L		103	43 - 151
4-Chloroaniline	ND		28.7	5.18	J	ug/L		18	10 - 152
4-Chloro-3-methylphenol	ND		28.7	19.5		ug/L		68	17 - 156
2-Chloronaphthalene	ND	F1	28.7	ND	F1	ug/L		0	10 - 155
2-Chlorophenol	ND		28.7	19.8		ug/L		69	19 - 130
4-Chlorophenyl phenyl ether	ND		28.7	27.4		ug/L		95	25 - 161
Dibenz[a,h]acridine	ND		28.7	22.9		ug/L		80	42 - 147
Dibenzofuran	ND		28.7	29.8		ug/L		104	18 - 157
3,3'-Dichlorobenzidine	ND	*	38.3	22.2		ug/L		58	10 - 172
2,4-Dichlorophenol	ND		28.7	19.8		ug/L		69	16 - 147
Diethyl phthalate	ND		28.7	27.6		ug/L		96	23 - 160
2,4-Dimethylphenol	ND		28.7	18.8		ug/L		65	25 - 146
Dimethyl phthalate	ND		28.7	24.7		ug/L		86	11 - 158
Di-n-butyl phthalate	ND		28.7	29.5		ug/L		103	28 - 162
4,6-Dinitro-ortho-cresol	ND		57.4	49.7		ug/L		87	10 - 168
2,4-Dinitrophenol	ND		57.4	50.8		ug/L		89	10 - 166
2,4-Dinitrotoluene	ND		28.7	31.8		ug/L		111	26 - 158
2,6-Dinitrotoluene	ND		28.7	28.8		ug/L		100	19 - 157
Di-n-octyl phthalate	ND		28.7	23.7		ug/L		83	42 - 150
1,4-Dioxane	ND		28.7	16.1		ug/L		56	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.7	31.9		ug/L		111	19 - 162
Hexachlorobenzene	ND		28.7	26.6		ug/L		93	45 - 145
Hexachlorocyclopentadiene	ND		28.7	9.30	J	ug/L		32	10 - 151
Hexachloroethane	ND		28.7	22.1		ug/L		77	29 - 130

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

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 464142

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	ND		28.7	30.2		ug/L		105	22 - 130
Isophorone	ND		28.7	24.6		ug/L		86	24 - 144
2-Methylphenol	ND		28.7	27.5		ug/L		96	22 - 130
3 & 4 Methylphenol	ND		28.7	24.2		ug/L		84	31 - 130
2-Nitroaniline	ND		28.7	27.9		ug/L		97	10 - 162
3-Nitroaniline	ND		28.7	21.3		ug/L		74	10 - 163
4-Nitroaniline	ND		28.7	29.2		ug/L		102	10 - 162
Nitrobenzene	ND		28.7	26.3		ug/L		92	34 - 135
2-Nitrophenol	ND		28.7	22.7		ug/L		79	27 - 134
4-Nitrophenol	ND		57.4	42.5		ug/L		74	10 - 175
N-Nitrosodimethylamine	ND	*	28.7	28.5		ug/L		99	10 - 139
N-Nitrosodi-n-propylamine	ND		28.7	30.4		ug/L		106	13 - 147
N-Nitrosodiphenylamine	ND		28.5	19.2		ug/L		67	31 - 150
Pentachlorophenol	ND		57.4	34.3		ug/L		60	10 - 180
Phenol	ND		28.7	18.6		ug/L		65	23 - 130
Pyridine	ND	*	57.4	39.9		ug/L		69	10 - 130
Quinoline	ND		28.7	10.0		ug/L		35	10 - 180
2,4,5-Trichlorophenol	ND		28.7	21.6		ug/L		75	43 - 137
2,4,6-Trichlorophenol	ND		28.7	19.2		ug/L		67	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*97*		*34 - 120*
2-Fluorophenol	*45*		*10 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Phenol-d5	*54*		*10 - 120*
Terphenyl-d14	*82*		*53 - 125*
2,4,6-Tribromophenol	*62*		*15 - 135*

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 464142

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		28.5	14.8		ug/L		52	10 - 143	14	63
Benzoic acid	ND	*	111	103		ug/L		93	10 - 134	14	49
Benzyl alcohol	ND		28.5	9.43	J	ug/L		33	10 - 154	14	37
Bis(2-chloroethoxy)methane	ND		28.5	24.5		ug/L		86	14 - 147	7	70
Bis(2-chloroethyl)ether	ND	F1	28.5	38.2	F1	ug/L		134	28 - 130	1	42
bis (2-chloroisopropyl) ether	ND		28.5	29.7		ug/L		104	10 - 141	2	41
Bis(2-ethylhexyl) phthalate	6.8	J	28.5	30.6		ug/L		84	43 - 160	10	35
4-Bromophenyl phenyl ether	ND		28.5	24.5		ug/L		86	26 - 159	8	30
Butyl benzyl phthalate	ND		28.5	32.2		ug/L		113	43 - 151	9	32
4-Chloroaniline	ND		28.5	5.85	J	ug/L		21	10 - 152	12	94
4-Chloro-3-methylphenol	ND		28.5	21.2		ug/L		74	17 - 156	8	40
2-Chloronaphthalene	ND	F1	28.5	26.4		ug/L		93	10 - 155	NC	29
2-Chlorophenol	ND		28.5	21.2		ug/L		74	19 - 130	7	42
4-Chlorophenyl phenyl ether	ND		28.5	25.3		ug/L		89	25 - 161	8	27
Dibenz[a,h]acridine	ND		28.5	24.2		ug/L		85	42 - 147	5	40

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

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 464142

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenzofuran	ND		28.5	27.5		ug/L		96	18 - 157	8	29
3,3'-Dichlorobenzidine	ND	*	38.0	22.8		ug/L		60	10 - 172	3	58
2,4-Dichlorophenol	ND		28.5	21.2		ug/L		74	16 - 147	7	43
Diethyl phthalate	ND		28.5	29.5		ug/L		103	23 - 160	7	40
2,4-Dimethylphenol	ND		28.5	18.8		ug/L		66	25 - 146	0	47
Dimethyl phthalate	ND		28.5	25.8		ug/L		91	11 - 158	4	36
Di-n-butyl phthalate	ND		28.5	29.5		ug/L		103	28 - 162	0	32
4,6-Dinitro-ortho-cresol	ND		57.0	52.1		ug/L		91	10 - 168	5	42
2,4-Dinitrophenol	ND		57.0	51.9		ug/L		91	10 - 166	2	36
2,4-Dinitrotoluene	ND		28.5	29.8		ug/L		104	26 - 158	6	28
2,6-Dinitrotoluene	ND		28.5	27.4		ug/L		96	19 - 157	5	28
Di-n-octyl phthalate	ND		28.5	27.1		ug/L		95	42 - 150	13	35
1,4-Dioxane	ND		28.5	16.7		ug/L		58	10 - 130	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.5	28.0		ug/L		98	19 - 162	13	40
Hexachlorobenzene	ND		28.5	25.2		ug/L		88	45 - 145	5	33
Hexachlorocyclopentadiene	ND		28.5	8.02	J	ug/L		28	10 - 151	15	50
Hexachloroethane	ND		28.5	20.4		ug/L		72	29 - 130	8	41
Indene	ND		28.5	30.9		ug/L		108	22 - 130	2	40
Isophorone	ND		28.5	24.8		ug/L		87	24 - 144	1	33
2-Methylphenol	ND		28.5	30.4		ug/L		107	22 - 130	10	47
3 & 4 Methylphenol	ND		28.5	25.8		ug/L		91	31 - 130	6	47
2-Nitroaniline	ND		28.5	27.5		ug/L		97	10 - 162	1	33
3-Nitroaniline	ND		28.5	20.1		ug/L		71	10 - 163	6	39
4-Nitroaniline	ND		28.5	26.8		ug/L		94	10 - 162	9	50
Nitrobenzene	ND		28.5	25.3		ug/L		89	34 - 135	4	35
2-Nitrophenol	ND		28.5	24.6		ug/L		86	27 - 134	8	43
4-Nitrophenol	ND		57.0	46.7		ug/L		82	10 - 175	9	82
N-Nitrosodimethylamine	ND	*	28.5	29.3		ug/L		103	10 - 139	3	62
N-Nitrosodi-n-propylamine	ND		28.5	29.3		ug/L		103	13 - 147	4	36
N-Nitrosodiphenylamine	ND		28.3	19.1		ug/L		68	31 - 150	0	34
Pentachlorophenol	ND		57.0	36.9		ug/L		65	10 - 180	7	42
Phenol	ND		28.5	20.8		ug/L		73	23 - 130	11	52
Pyridine	ND	*	57.0	42.9		ug/L		75	10 - 130	7	55
Quinoline	ND		28.5	11.9		ug/L		42	10 - 180	17	40
2,4,5-Trichlorophenol	ND		28.5	24.3		ug/L		85	43 - 137	12	42
2,4,6-Trichlorophenol	ND		28.5	20.8		ug/L		73	42 - 135	8	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*87*		*27 - 120*
Phenol-d5	*60*		*10 - 120*
Terphenyl-d14	*94*		*53 - 125*
2,4,6-Tribromophenol	*69*		*15 - 135*

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 464142

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol - RA	ND		10	1.7	ug/L		10/16/19 19:34	11/01/19 15:24	1

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 463963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Anthracene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Chrysene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Fluoranthene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Fluorene	ND		0.20	0.021	ug/L		10/16/19 19:34	10/31/19 18:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Phenanthrene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Pyrene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*116*		*33 - 138*	*10/16/19 19:34*	*10/31/19 18:12*	*1*
2-Fluorobiphenyl	*85*		*15 - 122*	*10/16/19 19:34*	*10/31/19 18:12*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*10/16/19 19:34*	*10/31/19 18:12*	*1*

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 463847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	32.3		ug/L		108	41 - 120
Acenaphthylene	30.0	32.7		ug/L		109	44 - 120
Anthracene	30.0	33.8		ug/L		113	49 - 120
Benzo[a]anthracene	30.0	33.5		ug/L		112	61 - 135
Benzo[a]pyrene	30.0	34.8		ug/L		116	52 - 120
Benzo[b]fluoranthene	30.0	34.2		ug/L		114	53 - 134
Benzo[g,h,i]perylene	30.0	35.2		ug/L		117	47 - 133
Benzo[k]fluoranthene	30.0	37.1		ug/L		124	57 - 134
Chrysene	30.0	33.6		ug/L		112	55 - 122
Dibenz(a,h)anthracene	30.0	34.9		ug/L		116	48 - 146
Fluoranthene	30.0	35.1		ug/L		117	54 - 128
Fluorene	30.0	34.3		ug/L		114	45 - 125

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

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 463847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	30.0	36.7		ug/L		122	43 - 142
Phenanthrene	30.0	31.4		ug/L		105	48 - 120
Pyrene	30.0	32.9		ug/L		110	48 - 132
1-Methylnaphthalene	30.0	30.3		ug/L		101	41 - 120
2-Methylnaphthalene	30.0	29.9		ug/L		100	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*120*		*33 - 138*
2-Fluorobiphenyl	*108*		*15 - 122*
Nitrobenzene-d5	*103*		*19 - 130*

Lab Sample ID: LCSD 400-461888/3-A
Matrix: Water
Analysis Batch: 463847

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	24.9		ug/L		83	41 - 120	26	56
Acenaphthylene	30.0	25.3		ug/L		84	44 - 120	25	56
Anthracene	30.0	26.6		ug/L		89	49 - 120	24	51
Benzo[a]anthracene	30.0	26.1		ug/L		87	61 - 135	25	49
Benzo[a]pyrene	30.0	27.5		ug/L		92	52 - 120	24	50
Benzo[b]fluoranthene	30.0	25.9		ug/L		86	53 - 134	28	54
Benzo[g,h,i]perylene	30.0	27.9		ug/L		93	47 - 133	23	50
Benzo[k]fluoranthene	30.0	28.3		ug/L		94	57 - 134	27	52
Chrysene	30.0	26.2		ug/L		87	55 - 122	25	50
Dibenz(a,h)anthracene	30.0	29.2		ug/L		97	48 - 146	18	50
Fluoranthene	30.0	27.6		ug/L		92	54 - 128	24	52
Fluorene	30.0	26.2		ug/L		87	45 - 125	27	56
Indeno[1,2,3-cd]pyrene	30.0	29.5		ug/L		98	43 - 142	22	51
Phenanthrene	30.0	24.5		ug/L		82	48 - 120	25	56
Pyrene	30.0	25.3		ug/L		84	48 - 132	26	52
1-Methylnaphthalene	30.0	24.0		ug/L		80	41 - 120	23	55
2-Methylnaphthalene	30.0	24.0		ug/L		80	32 - 124	22	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*91*		*33 - 138*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*81*		*19 - 130*

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 463847

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		28.7	24.4		ug/L		85	35 - 113
Acenaphthylene	ND		28.7	28.0		ug/L		97	41 - 118
Anthracene	ND		28.7	22.6		ug/L		79	45 - 122
Benzo[a]anthracene	ND		28.7	23.1		ug/L		80	55 - 133

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

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 463847

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	ND		28.7	21.2		ug/L		74	50 - 108
Benzo[b]fluoranthene	ND		28.7	22.1		ug/L		77	50 - 128
Benzo[g,h,i]perylene	ND		28.7	20.4		ug/L		71	46 - 133
Benzo[k]fluoranthene	ND		28.7	22.5		ug/L		78	52 - 128
Chrysene	ND		28.7	23.1		ug/L		81	52 - 116
Dibenz(a,h)anthracene	ND		28.7	21.9		ug/L		76	52 - 143
Fluoranthene	ND		28.7	29.3		ug/L		102	32 - 150
Fluorene	ND		28.7	30.5		ug/L		106	15 - 150
Indeno[1,2,3-cd]pyrene	ND		28.7	22.3		ug/L		78	41 - 141
Phenanthrene	ND		28.7	27.2		ug/L		95	36 - 125
Pyrene	ND		28.7	25.2		ug/L		88	41 - 127
1-Methylnaphthalene	ND		28.7	28.3		ug/L		98	10 - 150
2-Methylnaphthalene	ND		28.7	28.0		ug/L		98	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*85*		*33 - 138*
2-Fluorobiphenyl	*99*		*15 - 122*
Nitrobenzene-d5	*103*		*19 - 130*

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 463847

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.5	22.0		ug/L		77	35 - 113	10	49
Acenaphthylene	ND		28.5	24.5		ug/L		86	41 - 118	13	48
Anthracene	ND		28.5	20.9		ug/L		73	45 - 122	8	56
Benzo[a]anthracene	ND		28.5	23.0		ug/L		81	55 - 133	1	57
Benzo[a]pyrene	ND		28.5	22.5		ug/L		79	50 - 108	6	59
Benzo[b]fluoranthene	ND		28.5	23.0		ug/L		81	50 - 128	4	62
Benzo[g,h,i]perylene	ND		28.5	21.6		ug/L		76	46 - 133	6	58
Benzo[k]fluoranthene	ND		28.5	23.8		ug/L		84	52 - 128	6	58
Chrysene	ND		28.5	23.6		ug/L		83	52 - 116	2	59
Dibenz(a,h)anthracene	ND		28.5	23.7		ug/L		83	52 - 143	8	60
Fluoranthene	ND		28.5	26.6		ug/L		93	32 - 150	9	59
Fluorene	ND		28.5	26.9		ug/L		94	15 - 150	13	49
Indeno[1,2,3-cd]pyrene	ND		28.5	23.9		ug/L		84	41 - 141	7	58
Phenanthrene	ND		28.5	24.0		ug/L		84	36 - 125	12	69
Pyrene	ND		28.5	22.6		ug/L		79	41 - 127	11	58
1-Methylnaphthalene	ND		28.5	24.5		ug/L		86	10 - 150	14	66
2-Methylnaphthalene	ND		28.5	24.4		ug/L		85	10 - 150	14	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*85*		*33 - 138*
2-Fluorobiphenyl	*90*		*15 - 122*
Nitrobenzene-d5	*94*		*19 - 130*

QC Sample Results

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

Job ID: 400-177791-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462775/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462775

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		10/23/19 08:52	10/23/19 20:41	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/23/19 08:52	10/23/19 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*		*51 - 149*	*10/23/19 08:52*	*10/23/19 20:41*	*1*

Lab Sample ID: LCS 400-462775/2-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.102		ug/L		102	60 - 140
1,2-Dibromoethane	0.100	0.109		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*148*		*51 - 149*

Lab Sample ID: LCSD 400-462775/3-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.106		ug/L		106	60 - 140	4	30
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*51 - 149*

Lab Sample ID: 400-177791-4 MS
Matrix: Water
Analysis Batch: 462889

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.0962	0.118		ug/L		123	65 - 135
1,2-Dibromoethane	ND		0.0962	0.108		ug/L		112	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*167*	*X*	*51 - 149*

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 462889

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 462775

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		0.0978	0.109		ug/L		111	65 - 135	8	20
1,2-Dibromoethane	ND		0.0978	0.108		ug/L		110	65 - 135	1	20

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-177791-4 MSD
Matrix: Water
Analysis Batch: 462889

Client Sample ID: MW26-ROX-100919
Prep Type: Total/NA
Prep Batch: 462775

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	164	p X	51 - 149

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177791-1

Login Number: 177791
List Number: 1
Creator: Gore, Beija K

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	1090670,1090675,1090672,1090668,1090669,1090677,109067
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3 °C, 0.0°C ,1.5°C ,0.6°C ,0.0 °C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-177791-1

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177791-2

Data Reviewer: Elizabeth Kunkel

Peer Reviewer: Jeff Aust

Date Reviewed: 11/5/2019

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

Sample Identification	Sample Identification
TB-ROX-100919-8260-BP	TB-ROX-100919-8011-BP
MW23-ROX-100919	

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 toluene was detected in the trip blank; the detection was confirmed through re-analysis. The initial calibration verification for dichlorodifluoromethane was outside evaluation criteria. The LCS/LCSD recoveries or LCS/LCSD RPDs for several SVOCs were outside evaluation criteria. The SVOC surrogate recovery for 2,4,6-tribromophenol and terphenyl-d_{14} were outside criteria in sample MW23-ROX-100919 and laboratory quality control sample LCS 400-461888/6-A, respectively. The continuing calibration verification for several SVOCs were outside evaluation criteria, biased low. The internal standard perylene-d_{12} recovered outside evaluation criteria in the LCS/LCSD associated with benzenethiol. 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-100919-8260-BP	VOCs	Toluene	0.85 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	Toluene	1.4	**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 400-461888/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**142**/126	12	39-135/30
LCS/LCSD 400-461888/2-A/3-A	SVOCs	Benzoic acid	12/71	**141**	10-150/30
LCS/LCSD 400-461888/2-A/3-A	SVOCs	n-Nitrosodimethylamine	95/63	**41**	22-148/30
LCS/LCSD 400-461888/2-A/3-A	SVOCs	Pyridine	80/53	**41**	26-120/30
LCS/LCSD 400-461888/6-A/7-A	SVOCs	Benzenethiol	34/21	**49**	10-120/30

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

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW23-ROX-100919	SVOCs	2,4,6-Tribromophenol	**144**	15-135
LCS 400-461888/6-A	SVOCs	Terphenyl-d_{14}	**192**	53-125

Qualifications due to surrogate recoveries were not required if only one of three acid or 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?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
LCS 400-461888/6-A	SVOCs	Perylene-d_{12}	**3407**	286260-1145040
LCSD 400-461888/7-A	SVOCs	Perylene-d_{12}	**273552**	286260-1145040

LCS/LCSDs are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the laboratory case narrative indicated that the continuing calibration verification for several SVOC compounds were outside evaluation criteria, biased low, and are qualified in the associated sample as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-071019	SVOCs	Isophorone	**UJ**
MW23-ROX-071019	SVOCs	Nitrobenzene	**UJ**
MW23-ROX-071019	SVOCs	bis(2-chloroethyl) ether	**UJ**
MW23-ROX-071019	SVOCs	bis(2-ethylhexyl) phthalate	**UJ**
MW23-ROX-071019	SVOCs	n-Nitrosodi-n-propylamine	**UJ**
MW23-ROX-071019	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW23-ROX-071019	SVOCs	1,4-Dioxane	**UJ**
MW23-ROX-071019	SVOCs	Pyridine	**UJ**
MW23-ROX-071019	SVOCs	Aniline	**UJ**
MW23-ROX-071019	SVOCs	bis(2-chloroethoxy) methane	**UJ**
MW23-ROX-071019	SVOCs	3 & 4 Methylphenol	**UJ**
MW23-ROX-071019	SVOCs	Benzyl alcohol	**UJ**
MW23-ROX-071019	SVOCs	Phenol	**UJ**
MW23-ROX-071019	SVOCs	n-Nitrosodimethylamine	**UJ**
MW23-ROX-071019	SVOCs	1,2-Diphenylhydrazine	**UJ**

Additionally, the initial calibration verification for dichlorodifluoromethane was outside evaluation criteria and is qualified in the associated sample as summarized in the table below.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-071019	VOCs	Dichlorodifluoromethane	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-177791-2
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
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Authorized for release by:
11/4/2019 3:47:49 PM

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Reviewed on 11/5/2019

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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: 400-177791-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177791-2

Comments
No additional comments.

Receipt
The samples were received on 10/10/2019 9:19 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.0° C, 0.0° C, 0.5° C, 1.3° C and 1.5° C.

GC/MS VOA
Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-100919-8260-BP (400-177791-7) and MW23-ROX-100919 (400-177791-9). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compound that degrades in an acidic medium.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-451121 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260B: Sample TB-ROX-100919-8260-BP (400-177791-7) contained Toluene between the method detection limit and the reporting limit. Reanalysis was performed with concurring results.

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

GC/MS Semi VOA
Method 8270D: 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-100919 (400-177791-9). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464197 recovered above the upper control limit for Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464197 recovered outside acceptance criteria, low biased, for Isophorone, Nitrobenzene, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl) phthalate, N-Nitrosodi-n-propylamine, Hexachlorocyclopentadiene, 1,4-Dioxane, Pyridine, Aniline, Bis(2-chloroethoxy)methane, 3 & 4 Methylphenol, Benzyl alcohol, Phenol, N-Nitrosodimethylamine 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 8270D: The continuing calibration verification (CCV) associated with batch 400-464020 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 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: (LCS 400-461888/6-A). These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) for preparation batch 400-461888 and analytical batch 400-464020 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 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461888 and analytical batch 400-464020 recovered outside control limits for the following analytes: N-Nitrosodimethylamine, Pyridine and Benzoic acid.

Job ID: 400-177791-2 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-461888 and analytical batch 400-464020 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464020 recovered above the upper control limit for 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464020 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine, Pyridine and 1,4-Dioxane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

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

GC Semi VOA
Method 8011: Surrogate recovery for the following samples were outside control limits: (400-177791-A-4-A MS) and (400-177791-A-4-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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: 400-177791-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177791-7	TB-ROX-100919-8260-BP	Water	10/09/19 00:00	10/10/19 09:19	
400-177791-8	TB-ROX-100919-8011-BP	Water	10/09/19 00:00	10/10/19 09:19	
400-177791-9	MW23-ROX-100919	Water	10/09/19 10:55	10/10/19 09:19	

Detection Summary

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

Job ID: 400-177791-2

Client Sample ID: TB-ROX-100919-8260-BP — Lab Sample ID: 400-177791-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.85	J	1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: TB-ROX-100919-8011-BP — Lab Sample ID: 400-177791-8

No Detections.

Client Sample ID: MW23-ROX-100919 — Lab Sample ID: 400-177791-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	~~1.4~~	U	~~1.0~~ 1.4	0.41	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.021	J	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: 400-177791-2

Client Sample ID: TB-ROX-100919-8260-BP
Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-7
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			10/21/19 19:43	1
Acrolein	ND		20	10	ug/L			10/21/19 19:43	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/19 19:43	1
Benzene	ND		1.0	0.38	ug/L			10/21/19 19:43	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/19 19:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/19 19:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Bromoform	ND		5.0	0.71	ug/L			10/21/19 19:43	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/19 19:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/19 19:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/19 19:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/19 19:43	1
Chloroform	ND		1.0	0.60	ug/L			10/21/19 19:43	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/21/19 19:43	1
Chloromethane	ND		1.0	0.83	ug/L			10/21/19 19:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/19 19:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/19 19:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/19 19:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/19 19:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/19 19:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/19 19:43	1
2-Hexanone	ND		25	3.1	ug/L			10/21/19 19:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/19 19:43	1
Methylene bromide	ND		5.0	0.59	ug/L			10/21/19 19:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/19 19:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/19 19:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/21/19 19:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/21/19 19:43	1
Naphthalene	ND		1.0	1.0	ug/L			10/21/19 19:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/19 19:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/19 19:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/19 19:43	1
o-Xylene	ND		5.0	0.60	ug/L			10/21/19 19:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/19 19:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/19 19:43	1

Client Sample ID: TB-ROX-100919-8260-BP
Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-7
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			10/21/19 19:43	1
Styrene	ND		1.0	1.0	ug/L			10/21/19 19:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/19 19:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/21/19 19:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/21/19 19:43	1
Toluene	**0.85**	**J**	1.0	0.41	ug/L			10/21/19 19:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/19 19:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/21/19 19:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/19 19:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/21/19 19:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/21/19 19:43	1
Trichloroethene	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/21/19 19:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/19 19:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/19 19:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/19 19:43	1
Vinyl acetate	ND		25	2.0	ug/L			10/21/19 19:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/19 19:43	1
Xylenes, Total	ND		10	1.6	ug/L			10/21/19 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*10/21/19 19:43*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/21/19 19:43*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/21/19 19:43*	*1*

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

Job ID: 400-177791-2

Client Sample ID: TB-ROX-100919-8011-BP
Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-8
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/23/19 08:53	10/24/19 00:55	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/23/19 08:53	10/24/19 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*	*p*	*51 - 149*	*10/23/19 08:53*	*10/24/19 00:55*	*1*

Client Sample Results

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

Job ID: 400-177791-2

Client Sample ID: MW23-ROX-100919
Date Collected: 10/09/19 10:55
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-9
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			10/21/19 20:05	1
Acrolein	ND		20	10	ug/L			10/21/19 20:05	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/19 20:05	1
Benzene	ND		1.0	0.38	ug/L			10/21/19 20:05	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/19 20:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/19 20:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Bromoform	ND		5.0	0.71	ug/L			10/21/19 20:05	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/19 20:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/19 20:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/19 20:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/19 20:05	1
Chloroform	ND		1.0	0.60	ug/L			10/21/19 20:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/21/19 20:05	1
Chloromethane	ND		1.0	0.83	ug/L			10/21/19 20:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/19 20:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/19 20:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/19 20:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/19 20:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/19 20:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/19 20:05	1
2-Hexanone	ND		25	3.1	ug/L			10/21/19 20:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/19 20:05	1
Methylene bromide	ND		5.0	0.59	ug/L			10/21/19 20:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/19 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/19 20:05	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/21/19 20:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/21/19 20:05	1
Naphthalene	ND		1.0	1.0	ug/L			10/21/19 20:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/19 20:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/19 20:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/19 20:05	1
o-Xylene	ND		5.0	0.60	ug/L			10/21/19 20:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/19 20:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/19 20:05	1

Client Sample ID: MW23-ROX-100919
Date Collected: 10/09/19 10:55
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/21/19 20:05	1
Styrene	ND		1.0	1.0	ug/L			10/21/19 20:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/19 20:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/21/19 20:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/21/19 20:05	1
Toluene	~~1.4~~	U	~~1.0~~ 1.4	0.41	ug/L			10/21/19 20:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/19 20:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/21/19 20:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/19 20:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/21/19 20:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/21/19 20:05	1
Trichloroethene	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/21/19 20:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/19 20:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/19 20:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/19 20:05	1
Vinyl acetate	ND		25	2.0	ug/L			10/21/19 20:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/19 20:05	1
Xylenes, Total	ND		10	1.6	ug/L			10/21/19 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*10/21/19 20:05*	*1*
Dibromofluoromethane	*110*		*81 - 121*		*10/21/19 20:05*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/21/19 20:05*	*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		10/16/19 19:34	10/30/19 18:02	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1
Anthracene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Chrysene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Fluoranthene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1
Fluorene	ND		0.19	0.020	ug/L		10/16/19 19:34	10/30/19 18:02	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/16/19 19:34	10/30/19 18:02	1
Phenanthrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1
Pyrene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1
2-Methylnaphthalene	**0.021**	J	0.19	0.019	ug/L		10/16/19 19:34	10/30/19 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*56*		*33 - 138*	*10/16/19 19:34*	*10/30/19 18:02*	*1*
2-Fluorobiphenyl	*67*		*15 - 122*	*10/16/19 19:34*	*10/30/19 18:02*	*1*

Client Sample ID: MW23-ROX-100919
Date Collected: 10/09/19 10:55
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		19 - 130	10/16/19 19:34	10/30/19 18:02	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		10/16/19 19:34	11/01/19 20:10	1
Benzenethiol	ND		9.5	1.6	ug/L		10/16/19 19:34	11/01/19 20:10	1
Benzoic acid	ND		28	6.9	ug/L		10/16/19 19:34	11/01/19 20:10	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 20:10	1
Bis(2-chloroethoxy)methane	ND		9.5	0.65	ug/L		10/16/19 19:34	11/01/19 20:10	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/16/19 19:34	11/01/19 20:10	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/16/19 19:34	11/01/19 20:10	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		10/16/19 19:34	11/01/19 20:10	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/16/19 19:34	11/01/19 20:10	1
Butyl benzyl phthalate	ND		9.5	0.65	ug/L		10/16/19 19:34	11/01/19 20:10	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/16/19 19:34	11/01/19 20:10	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/16/19 19:34	11/01/19 20:10	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/16/19 19:34	11/01/19 20:10	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/16/19 19:34	11/01/19 20:10	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 20:10	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		10/16/19 19:34	11/01/19 20:10	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/16/19 19:34	11/01/19 20:10	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		10/16/19 19:34	11/01/19 20:10	1
Diethyl phthalate	ND		9.5	0.66	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 20:10	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/16/19 19:34	11/01/19 20:10	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/16/19 19:34	11/01/19 20:10	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/16/19 19:34	11/01/19 20:10	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/16/19 19:34	11/01/19 20:10	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 20:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 20:10	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/16/19 19:34	11/01/19 20:10	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/16/19 19:34	11/01/19 20:10	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/16/19 19:34	11/01/19 20:10	1
Indene	ND		9.5	0.95	ug/L		10/16/19 19:34	11/01/19 20:10	1
Isophorone	ND		9.5	0.54	ug/L		10/16/19 19:34	11/01/19 20:10	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/16/19 19:34	11/01/19 20:10	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/16/19 19:34	11/01/19 20:10	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/16/19 19:34	11/01/19 20:10	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/16/19 19:34	11/01/19 20:10	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/16/19 19:34	11/01/19 20:10	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/16/19 19:34	11/01/19 20:10	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/16/19 19:34	11/01/19 20:10	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/16/19 19:34	11/01/19 20:10	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 20:10	1

Client Sample ID: MW23-ROX-100919
Date Collected: 10/09/19 10:55
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/16/19 19:34	11/01/19 20:10	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/16/19 19:34	11/01/19 20:10	1
Pentachlorophenol	ND		19	1.7	ug/L		10/16/19 19:34	11/01/19 20:10	1
Phenol	ND		9.5	2.5	ug/L		10/16/19 19:34	11/01/19 20:10	1
Pyridine	ND		9.5	3.0	ug/L		10/16/19 19:34	11/01/19 20:10	1
Quinoline	ND		9.5	5.7	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/16/19 19:34	11/01/19 20:10	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/16/19 19:34	11/01/19 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 120*	*10/16/19 19:34*	*11/01/19 20:10*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/16/19 19:34*	*11/01/19 20:10*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*10/16/19 19:34*	*11/01/19 20:10*	*1*
Phenol-d5	*59*		*10 - 120*	*10/16/19 19:34*	*11/01/19 20:10*	*1*
Terphenyl-d14	*80*		*53 - 125*	*10/16/19 19:34*	*11/01/19 20:10*	*1*
2,4,6-Tribromophenol	*144*	*X*	*15 - 135*	*10/16/19 19:34*	*11/01/19 20:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/23/19 08:53	10/24/19 01:18	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/23/19 08:53	10/24/19 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*10/23/19 08:53*	*10/24/19 01:18*	*1*

Definitions/Glossary

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

Job ID: 400-177791-2

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

Glossary

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

Surrogate Summary

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

Job ID: 400-177791-2

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)
400-177791-7	TB-ROX-100919-8260-BP	110	106	98
400-177791-9	MW23-ROX-100919	108	110	100
LCS 400-462385/1002	Lab Control Sample	102	106	96
MB 400-462385/4	Method Blank	100	108	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-177791-9	MW23-ROX-100919	81	51	72	59	80	144 X
LCS 400-461888/2-A	Lab Control Sample	90	88	82	102	105	135
LCS 400-461888/6-A	Lab Control Sample	120	69	86	28	192 X	118
LCSD 400-461888/3-A	Lab Control Sample Dup	79	96	73	99	90	117
LCSD 400-461888/7-A	Lab Control Sample Dup	88	59	75	26	120	115
MB 400-461888/1-A	Method Blank	115	69	89	55	106	104

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)
400-177791-9	MW23-ROX-100919	56	67	71
LCS 400-461888/2-A	Lab Control Sample	120	108	103
LCSD 400-461888/3-A	Lab Control Sample Dup	91	83	81
MB 400-461888/1-A	Method Blank	116	85	92

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-177791-2

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)**
400-177791-8	TB-ROX-100919-8011-BP	72 p
400-177791-9	MW23-ROX-100919	96
LCS 400-462775/2-A	Lab Control Sample	148
MB 400-462775/1-A	Method Blank	145

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177791-2

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: 400-177791-2

Client Sample ID: TB-ROX-100919-8260-BP

Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-7
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	462385	10/21/19 19:43	CS	TAL PEN

Client Sample ID: TB-ROX-100919-8011-BP

Date Collected: 10/09/19 00:00
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.6 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 00:55	DS	TAL PEN

Client Sample ID: MW23-ROX-100919

Date Collected: 10/09/19 10:55
Date Received: 10/10/19 09:19

Lab Sample ID: 400-177791-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462385	10/21/19 20:05	CS	TAL PEN
Total/NA	Prep	3520C			1054.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 20:10	VC1	TAL PEN
Total/NA	Prep	3520C			1054.2 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463847	10/30/19 18:02	PP1	TAL PEN
Total/NA	Prep	8011			35.6 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 01:18	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-461888/1-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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 16:59	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463963	10/31/19 18:12	PP1	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462385/4
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	462385	10/21/19 14:37	CS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462775/1-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 20:41	DS	TAL PEN

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

Lab Sample ID: LCS 400-461888/2-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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 17:20	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463847	10/30/19 14:20	PP1	TAL PEN

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

Lab Sample ID: LCS 400-461888/6-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 18:45	VC1	TAL PEN

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

Lab Sample ID: LCS 400-462385/1002
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	462385	10/21/19 13:36	CS	TAL PEN

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

Lab Sample ID: LCS 400-462775/2-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:04	DS	TAL PEN

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

Lab Sample ID: LCSD 400-461888/3-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	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 17:41	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463847	10/30/19 14:36	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-177791-2

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-461888/7-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	461888	10/16/19 19:34	CGM	TAL PEN
Total/NA	Analysis	8270D		1			464020	10/31/19 19:06	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462775/3-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:28	DS	TAL PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-177791-2

GC/MS VOA

Analysis Batch: 462385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-7	TB-ROX-100919-8260-BP	Total/NA	Water	8260B	
400-177791-9	MW23-ROX-100919	Total/NA	Water	8260B	
MB 400-462385/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462385/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 461888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-9	MW23-ROX-100919	Total/NA	Water	3520C	
MB 400-461888/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-461888/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-461888/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-461888/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-461888/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 463847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-9	MW23-ROX-100919	Total/NA	Water	8270D LL	461888
LCS 400-461888/2-A	Lab Control Sample	Total/NA	Water	8270D LL	461888
LCSD 400-461888/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	461888

Analysis Batch: 463963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461888/1-A	Method Blank	Total/NA	Water	8270D LL	461888

Analysis Batch: 464020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-461888/1-A	Method Blank	Total/NA	Water	8270D	461888
LCS 400-461888/2-A	Lab Control Sample	Total/NA	Water	8270D	461888
LCS 400-461888/6-A	Lab Control Sample	Total/NA	Water	8270D	461888
LCSD 400-461888/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	461888
LCSD 400-461888/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	461888

Analysis Batch: 464197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-9	MW23-ROX-100919	Total/NA	Water	8270D	461888

GC Semi VOA

Prep Batch: 462775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-8	TB-ROX-100919-8011-BP	Total/NA	Water	8011	
400-177791-9	MW23-ROX-100919	Total/NA	Water	8011	
MB 400-462775/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462775/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462775/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 462889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177791-8	TB-ROX-100919-8011-BP	Total/NA	Water	8011	462775
400-177791-9	MW23-ROX-100919	Total/NA	Water	8011	462775

GC Semi VOA (Continued)

Analysis Batch: 462889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462775/1-A	Method Blank	Total/NA	Water	8011	462775
LCS 400-462775/2-A	Lab Control Sample	Total/NA	Water	8011	462775
LCSD 400-462775/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462775

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

Lab Sample ID: MB 400-462385/4
Matrix: Water
Analysis Batch: 462385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/21/19 14:37	1
Acrolein	ND		20	10	ug/L			10/21/19 14:37	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/19 14:37	1
Benzene	ND		1.0	0.38	ug/L			10/21/19 14:37	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/19 14:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/19 14:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Bromoform	ND		5.0	0.71	ug/L			10/21/19 14:37	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/19 14:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/19 14:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/19 14:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/19 14:37	1
Chloroform	ND		1.0	0.60	ug/L			10/21/19 14:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/21/19 14:37	1
Chloromethane	ND		1.0	0.83	ug/L			10/21/19 14:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/19 14:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/19 14:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/19 14:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/19 14:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/19 14:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/19 14:37	1
2-Hexanone	ND		25	3.1	ug/L			10/21/19 14:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/19 14:37	1
Methylene bromide	ND		5.0	0.59	ug/L			10/21/19 14:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/19 14:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/19 14:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/21/19 14:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/21/19 14:37	1
Naphthalene	ND		1.0	1.0	ug/L			10/21/19 14:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/19 14:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/19 14:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/19 14:37	1
o-Xylene	ND		5.0	0.60	ug/L			10/21/19 14:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/19 14:37	1

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

Lab Sample ID: MB 400-462385/4
Matrix: Water
Analysis Batch: 462385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/19 14:37	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/21/19 14:37	1
Styrene	ND		1.0	1.0	ug/L			10/21/19 14:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/19 14:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/21/19 14:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/21/19 14:37	1
Toluene	ND		1.0	0.41	ug/L			10/21/19 14:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/19 14:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/21/19 14:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/19 14:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/21/19 14:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/21/19 14:37	1
Trichloroethene	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/21/19 14:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/19 14:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/19 14:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/19 14:37	1
Vinyl acetate	ND		25	2.0	ug/L			10/21/19 14:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/19 14:37	1
Xylenes, Total	ND		10	1.6	ug/L			10/21/19 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*10/21/19 14:37*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*10/21/19 14:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/21/19 14:37*	*1*

Lab Sample ID: LCS 400-462385/1002
Matrix: Water
Analysis Batch: 462385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	216		ug/L		108	43 - 160
Acrolein	500	603		ug/L		121	38 - 160
Acrylonitrile	500	533		ug/L		107	64 - 142
Benzene	50.0	49.5		ug/L		99	70 - 130
Bromobenzene	50.0	53.4		ug/L		107	70 - 132
Bromochloromethane	50.0	49.5		ug/L		99	70 - 130
Bromodichloromethane	50.0	55.4		ug/L		111	67 - 133
Bromoform	50.0	60.0		ug/L		120	57 - 140
Bromomethane	50.0	58.8		ug/L		118	10 - 160
2-Butanone (MEK)	200	203		ug/L		101	61 - 145
Carbon disulfide	50.0	45.1		ug/L		90	61 - 137
Carbon tetrachloride	50.0	54.6		ug/L		109	61 - 137
Chlorobenzene	50.0	50.1		ug/L		100	70 - 130
Dibromochloromethane	50.0	45.6		ug/L		91	67 - 135
Chloroethane	50.0	53.4		ug/L		107	55 - 141

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

Lab Sample ID: LCS 400-462385/1002
Matrix: Water
Analysis Batch: 462385

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	50.8		ug/L		102	10 - 160
Chloroform	50.0	52.4		ug/L		105	69 - 130
1-Chlorohexane	50.0	50.6		ug/L		101	69 - 130
Chloromethane	50.0	45.5		ug/L		91	58 - 137
cis-1,2-Dichloroethene	50.0	52.3		ug/L		105	68 - 130
cis-1,3-Dichloropropene	50.0	49.2		ug/L		98	69 - 132
1,2-Dichlorobenzene	50.0	49.3		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	70 - 130
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	36.0		ug/L		72	41 - 146
1,1-Dichloroethane	50.0	53.1		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	49.3		ug/L		99	63 - 134
1,2-Dichloropropane	50.0	53.3		ug/L		107	70 - 130
1,3-Dichloropropane	50.0	47.6		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	54.5		ug/L		109	52 - 135
1,1-Dichloropropene	50.0	51.7		ug/L		103	70 - 130
Ethylbenzene	50.0	51.3		ug/L		103	70 - 130
Ethyl methacrylate	50.0	49.9		ug/L		100	68 - 130
Hexachlorobutadiene	50.0	58.2		ug/L		116	53 - 140
2-Hexanone	200	223		ug/L		112	65 - 137
Isopropylbenzene	50.0	45.8		ug/L		92	70 - 130
Methylene bromide	50.0	51.5		ug/L		103	70 - 130
Methylene Chloride	50.0	46.5		ug/L		93	66 - 135
4-Methyl-2-pentanone (MIBK)	200	234		ug/L		117	69 - 138
Methyl tert-butyl ether	50.0	48.5		ug/L		97	66 - 130
m-Xylene & p-Xylene	50.0	51.2		ug/L		102	70 - 130
Naphthalene	50.0	40.3		ug/L		81	47 - 149
n-Butylbenzene	50.0	46.5		ug/L		93	67 - 130
N-Propylbenzene	50.0	49.5		ug/L		99	70 - 130
o-Chlorotoluene	50.0	54.8		ug/L		110	70 - 130
o-Xylene	50.0	49.7		ug/L		99	70 - 130
p-Chlorotoluene	50.0	51.3		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	48.4		ug/L		97	65 - 130
sec-Butylbenzene	50.0	49.4		ug/L		99	66 - 130
Styrene	50.0	49.8		ug/L		100	70 - 130
tert-Butylbenzene	50.0	48.8		ug/L		98	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.3		ug/L		93	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	70 - 131
Tetrachloroethene	50.0	45.2		ug/L		90	65 - 130
Toluene	50.0	49.8		ug/L		100	70 - 130
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	48.2		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	47.8		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	51.1		ug/L		102	60 - 140
1,1,1-Trichloroethane	50.0	54.0		ug/L		108	68 - 130
1,1,2-Trichloroethane	50.0	48.7		ug/L		97	70 - 130
Trichloroethene	50.0	48.4		ug/L		97	70 - 130
Trichlorofluoromethane	50.0	59.7		ug/L		119	65 - 138

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

Lab Sample ID: LCS 400-462385/1002
Matrix: Water
Analysis Batch: 462385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	48.4		ug/L		97	70 - 130
1,2,4-Trimethylbenzene	50.0	49.3		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	50.0	49.0		ug/L		98	69 - 130
Vinyl acetate	100	127		ug/L		127	26 - 160
Vinyl chloride	50.0	55.2		ug/L		110	59 - 136
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
Benzenethiol	ND		10	1.7	ug/L		10/16/19 19:34	10/31/19 16:59	1
Benzoic acid	ND		30	7.3	ug/L		10/16/19 19:34	10/31/19 16:59	1
Benzyl alcohol	ND		10	2.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/16/19 19:34	10/31/19 16:59	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/16/19 19:34	10/31/19 16:59	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/16/19 19:34	10/31/19 16:59	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/16/19 19:34	10/31/19 16:59	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Chloroaniline	ND		10	3.4	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Chlorophenol	ND		10	2.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Dibenzofuran	ND		10	0.52	ug/L		10/16/19 19:34	10/31/19 16:59	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Diethyl phthalate	ND		10	0.70	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/16/19 19:34	10/31/19 16:59	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/16/19 19:34	10/31/19 16:59	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/16/19 19:34	10/31/19 16:59	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/16/19 19:34	10/31/19 16:59	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/16/19 19:34	10/31/19 16:59	1
1,4-Dioxane	ND		10	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/16/19 19:34	10/31/19 16:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/16/19 19:34	10/31/19 16:59	1
Hexachloroethane	ND		10	4.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
Indene	ND		10	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
Isophorone	ND		10	0.57	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Methylphenol	ND		10	1.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Nitroaniline	ND		10	2.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
3-Nitroaniline	ND		10	1.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Nitroaniline	ND		10	2.5	ug/L		10/16/19 19:34	10/31/19 16:59	1
Nitrobenzene	ND		10	0.55	ug/L		10/16/19 19:34	10/31/19 16:59	1
2-Nitrophenol	ND		10	0.65	ug/L		10/16/19 19:34	10/31/19 16:59	1
4-Nitrophenol	ND		10	2.1	ug/L		10/16/19 19:34	10/31/19 16:59	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/16/19 19:34	10/31/19 16:59	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/16/19 19:34	10/31/19 16:59	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/16/19 19:34	10/31/19 16:59	1
Pentachlorophenol	ND		20	1.8	ug/L		10/16/19 19:34	10/31/19 16:59	1
Phenol	ND		10	2.6	ug/L		10/16/19 19:34	10/31/19 16:59	1
Pyridine	ND		10	3.2	ug/L		10/16/19 19:34	10/31/19 16:59	1
Quinoline	ND		10	6.0	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/16/19 19:34	10/31/19 16:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/16/19 19:34	10/31/19 16:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*115*		*34 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
2-Fluorophenol	*69*		*10 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
Nitrobenzene-d5	*89*		*27 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
Phenol-d5	*55*		*10 - 120*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
Terphenyl-d14	*106*		*53 - 125*	*10/16/19 19:34*	*10/31/19 16:59*	*1*
2,4,6-Tribromophenol	*104*		*15 - 135*	*10/16/19 19:34*	*10/31/19 16:59*	*1*

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	32.9		ug/L		110	29 - 120
Benzoic acid	117	14.2	J	ug/L		12	10 - 150
Benzyl alcohol	30.0	28.5		ug/L		95	19 - 125
Bis(2-chloroethoxy)methane	30.0	22.3		ug/L		74	45 - 120
Bis(2-chloroethyl)ether	30.0	24.2		ug/L		81	48 - 120
bis (2-chloroisopropyl) ether	30.0	21.4		ug/L		71	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.4		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	33.1		ug/L		110	55 - 122
Butyl benzyl phthalate	30.0	30.1		ug/L		100	46 - 145
4-Chloroaniline	30.0	20.9		ug/L		70	30 - 120
4-Chloro-3-methylphenol	30.0	28.7		ug/L		96	39 - 140

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

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	28.1		ug/L		94	52 - 120
2-Chlorophenol	30.0	28.7		ug/L		96	34 - 120
4-Chlorophenyl phenyl ether	30.0	30.1		ug/L		100	58 - 124
Dibenz[a,h]acridine	30.0	31.9		ug/L		106	46 - 149
Dibenzofuran	30.0	28.4		ug/L		95	58 - 123
3,3'-Dichlorobenzidine	40.0	56.6	*	ug/L		142	39 - 135
2,4-Dichlorophenol	30.0	27.0		ug/L		90	39 - 128
Diethyl phthalate	30.0	28.0		ug/L		93	44 - 146
2,4-Dimethylphenol	30.0	24.5		ug/L		82	44 - 120
Dimethyl phthalate	30.0	27.8		ug/L		93	50 - 131
Di-n-butyl phthalate	30.0	28.1		ug/L		94	55 - 131
4,6-Dinitro-ortho-cresol	60.0	61.2		ug/L		102	10 - 150
2,4-Dinitrophenol	60.0	53.1		ug/L		89	10 - 150
2,4-Dinitrotoluene	30.0	30.3		ug/L		101	58 - 140
2,6-Dinitrotoluene	30.0	30.5		ug/L		102	57 - 130
Di-n-octyl phthalate	30.0	31.8		ug/L		106	50 - 150
1,4-Dioxane	30.0	14.6		ug/L		49	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	22.9		ug/L		76	47 - 123
Hexachlorobenzene	30.0	34.3		ug/L		114	52 - 131
Hexachlorocyclopentadiene	30.0	27.0		ug/L		90	10 - 129
Hexachloroethane	30.0	20.6		ug/L		69	41 - 120
Indene	30.0	23.4		ug/L		78	47 - 120
Isophorone	30.0	22.5		ug/L		75	49 - 120
2-Methylphenol	30.0	26.6		ug/L		89	39 - 123
3 & 4 Methylphenol	30.0	21.9		ug/L		73	38 - 121
2-Nitroaniline	30.0	26.0		ug/L		87	47 - 150
3-Nitroaniline	30.0	28.7		ug/L		96	34 - 132
4-Nitroaniline	30.0	33.2		ug/L		111	41 - 135
Nitrobenzene	30.0	22.1		ug/L		74	47 - 120
2-Nitrophenol	30.0	28.2		ug/L		94	28 - 136
4-Nitrophenol	60.0	59.0		ug/L		98	10 - 150
N-Nitrosodimethylamine	30.0	28.5		ug/L		95	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.4		ug/L		65	44 - 120
N-Nitrosodiphenylamine	29.8	29.0		ug/L		97	56 - 120
Pentachlorophenol	60.0	63.0		ug/L		105	15 - 141
Phenol	30.0	28.1		ug/L		94	33 - 120
Pyridine	60.0	47.7		ug/L		80	26 - 120
Quinoline	30.0	29.0		ug/L		97	51 - 129
2,4,5-Trichlorophenol	30.0	33.2		ug/L		111	38 - 147
2,4,6-Trichlorophenol	30.0	32.0		ug/L		107	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*34 - 120*
2-Fluorophenol	*88*		*10 - 120*
Nitrobenzene-d5	*82*		*27 - 120*
Phenol-d5	*102*		*10 - 120*
Terphenyl-d14	*105*		*53 - 125*

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

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	135		15 - 135

Lab Sample ID: LCS 400-461888/6-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	10.3		ug/L		34	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	120		34 - 120
2-Fluorophenol	69		10 - 120
Nitrobenzene-d5	86		27 - 120
Phenol-d5	28		10 - 120
Terphenyl-d14	192	X	53 - 125
2,4,6-Tribromophenol	118		15 - 135

Lab Sample ID: LCSD 400-461888/3-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	28.8		ug/L		96	29 - 120	13	30
Benzoic acid	117	82.7	*	ug/L		71	10 - 150	141	30
Benzyl alcohol	30.0	23.8		ug/L		79	19 - 125	18	30
Bis(2-chloroethoxy)methane	30.0	19.5		ug/L		65	45 - 120	13	30
Bis(2-chloroethyl)ether	30.0	23.5		ug/L		78	48 - 120	3	30
bis (2-chloroisopropyl) ether	30.0	18.5		ug/L		62	30 - 125	14	30
Bis(2-ethylhexyl) phthalate	30.0	23.5		ug/L		78	48 - 150	12	30
4-Bromophenyl phenyl ether	30.0	29.4		ug/L		98	55 - 122	12	30
Butyl benzyl phthalate	30.0	26.4		ug/L		88	46 - 145	13	30
4-Chloroaniline	30.0	18.9		ug/L		63	30 - 120	10	30
4-Chloro-3-methylphenol	30.0	24.9		ug/L		83	39 - 140	14	30
2-Chloronaphthalene	30.0	25.2		ug/L		84	52 - 120	11	30
2-Chlorophenol	30.0	25.6		ug/L		85	34 - 120	11	30
4-Chlorophenyl phenyl ether	30.0	26.5		ug/L		88	58 - 124	13	30
Dibenz[a,h]acridine	30.0	24.7		ug/L		82	46 - 149	26	30
Dibenzofuran	30.0	25.6		ug/L		85	58 - 123	10	30
3,3'-Dichlorobenzidine	40.0	50.3		ug/L		126	39 - 135	12	30
2,4-Dichlorophenol	30.0	24.1		ug/L		80	39 - 128	11	30
Diethyl phthalate	30.0	25.2		ug/L		84	44 - 146	10	30
2,4-Dimethylphenol	30.0	22.0		ug/L		73	44 - 120	11	30
Dimethyl phthalate	30.0	25.0		ug/L		83	50 - 131	11	30
Di-n-butyl phthalate	30.0	25.1		ug/L		84	55 - 131	11	30
4,6-Dinitro-ortho-cresol	60.0	62.5		ug/L		104	10 - 150	2	30
2,4-Dinitrophenol	60.0	67.5		ug/L		113	10 - 150	24	30
2,4-Dinitrotoluene	30.0	27.2		ug/L		91	58 - 140	11	30
2,6-Dinitrotoluene	30.0	27.2		ug/L		91	57 - 130	11	30

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

Lab Sample ID: LCSD 400-461888/3-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	29.4		ug/L		98	50 - 150	8	30
1,4-Dioxane	30.0	14.6		ug/L		49	25 - 120	0	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.4		ug/L		68	47 - 123	11	30
Hexachlorobenzene	30.0	30.2		ug/L		101	52 - 131	13	30
Hexachlorocyclopentadiene	30.0	20.5		ug/L		68	10 - 129	28	30
Hexachloroethane	30.0	22.0		ug/L		73	41 - 120	7	30
Indene	30.0	24.4		ug/L		81	47 - 120	4	30
Isophorone	30.0	20.5		ug/L		68	49 - 120	9	30
2-Methylphenol	30.0	24.1		ug/L		80	39 - 123	10	30
3 & 4 Methylphenol	30.0	23.1		ug/L		77	38 - 121	5	30
2-Nitroaniline	30.0	22.7		ug/L		76	47 - 150	14	30
3-Nitroaniline	30.0	26.0		ug/L		87	34 - 132	10	30
4-Nitroaniline	30.0	30.2		ug/L		101	41 - 135	9	30
Nitrobenzene	30.0	19.7		ug/L		66	47 - 120	12	30
2-Nitrophenol	30.0	25.5		ug/L		85	28 - 136	10	30
4-Nitrophenol	60.0	51.3		ug/L		86	10 - 150	14	30
N-Nitrosodimethylamine	30.0	18.8	*	ug/L		63	22 - 148	41	30
N-Nitrosodi-n-propylamine	30.0	20.7		ug/L		69	44 - 120	6	30
N-Nitrosodiphenylamine	29.8	25.5		ug/L		86	56 - 120	13	30
Pentachlorophenol	60.0	55.8		ug/L		93	15 - 141	12	30
Phenol	30.0	26.8		ug/L		89	33 - 120	4	30
Pyridine	60.0	31.6	*	ug/L		53	26 - 120	41	30
Quinoline	30.0	24.4		ug/L		81	51 - 129	17	30
2,4,5-Trichlorophenol	30.0	28.8		ug/L		96	38 - 147	14	30
2,4,6-Trichlorophenol	30.0	28.4		ug/L		95	36 - 139	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*34 - 120*
2-Fluorophenol	*96*		*10 - 120*
Nitrobenzene-d5	*73*		*27 - 120*
Phenol-d5	*99*		*10 - 120*
Terphenyl-d14	*90*		*53 - 125*
2,4,6-Tribromophenol	*117*		*15 - 135*

Lab Sample ID: LCSD 400-461888/7-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	6.24	J *	ug/L		21	10 - 120	49	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*34 - 120*
2-Fluorophenol	*59*		*10 - 120*
Nitrobenzene-d5	*75*		*27 - 120*
Phenol-d5	*26*		*10 - 120*
Terphenyl-d14	*120*		*53 - 125*

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

Lab Sample ID: LCSD 400-461888/7-A
Matrix: Water
Analysis Batch: 464020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	115		15 - 135

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

Lab Sample ID: MB 400-461888/1-A
Matrix: Water
Analysis Batch: 463963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Anthracene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Chrysene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Fluoranthene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Fluorene	ND		0.20	0.021	ug/L		10/16/19 19:34	10/31/19 18:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/16/19 19:34	10/31/19 18:12	1
Phenanthrene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
Pyrene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/16/19 19:34	10/31/19 18:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	116		33 - 138	10/16/19 19:34	10/31/19 18:12	1
2-Fluorobiphenyl	85		15 - 122	10/16/19 19:34	10/31/19 18:12	1
Nitrobenzene-d5	92		19 - 130	10/16/19 19:34	10/31/19 18:12	1

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 463847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	32.3		ug/L		108	41 - 120
Acenaphthylene	30.0	32.7		ug/L		109	44 - 120
Anthracene	30.0	33.8		ug/L		113	49 - 120
Benzo[a]anthracene	30.0	33.5		ug/L		112	61 - 135
Benzo[a]pyrene	30.0	34.8		ug/L		116	52 - 120
Benzo[b]fluoranthene	30.0	34.2		ug/L		114	53 - 134
Benzo[g,h,i]perylene	30.0	35.2		ug/L		117	47 - 133
Benzo[k]fluoranthene	30.0	37.1		ug/L		124	57 - 134
Chrysene	30.0	33.6		ug/L		112	55 - 122
Dibenz(a,h)anthracene	30.0	34.9		ug/L		116	48 - 146
Fluoranthene	30.0	35.1		ug/L		117	54 - 128

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

Lab Sample ID: LCS 400-461888/2-A
Matrix: Water
Analysis Batch: 463847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	34.3		ug/L		114	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	36.7		ug/L		122	43 - 142
Phenanthrene	30.0	31.4		ug/L		105	48 - 120
Pyrene	30.0	32.9		ug/L		110	48 - 132
1-Methylnaphthalene	30.0	30.3		ug/L		101	41 - 120
2-Methylnaphthalene	30.0	29.9		ug/L		100	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*120*		*33 - 138*
2-Fluorobiphenyl	*108*		*15 - 122*
Nitrobenzene-d5	*103*		*19 - 130*

Lab Sample ID: LCSD 400-461888/3-A
Matrix: Water
Analysis Batch: 463847

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	24.9		ug/L		83	41 - 120	26	56
Acenaphthylene	30.0	25.3		ug/L		84	44 - 120	25	56
Anthracene	30.0	26.6		ug/L		89	49 - 120	24	51
Benzo[a]anthracene	30.0	26.1		ug/L		87	61 - 135	25	49
Benzo[a]pyrene	30.0	27.5		ug/L		92	52 - 120	24	50
Benzo[b]fluoranthene	30.0	25.9		ug/L		86	53 - 134	28	54
Benzo[g,h,i]perylene	30.0	27.9		ug/L		93	47 - 133	23	50
Benzo[k]fluoranthene	30.0	28.3		ug/L		94	57 - 134	27	52
Chrysene	30.0	26.2		ug/L		87	55 - 122	25	50
Dibenz(a,h)anthracene	30.0	29.2		ug/L		97	48 - 146	18	50
Fluoranthene	30.0	27.6		ug/L		92	54 - 128	24	52
Fluorene	30.0	26.2		ug/L		87	45 - 125	27	56
Indeno[1,2,3-cd]pyrene	30.0	29.5		ug/L		98	43 - 142	22	51
Phenanthrene	30.0	24.5		ug/L		82	48 - 120	25	56
Pyrene	30.0	25.3		ug/L		84	48 - 132	26	52
1-Methylnaphthalene	30.0	24.0		ug/L		80	41 - 120	23	55
2-Methylnaphthalene	30.0	24.0		ug/L		80	32 - 124	22	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*91*		*33 - 138*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*81*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462775/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462775

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		10/23/19 08:52	10/23/19 20:41	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-462775/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462775

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/23/19 08:52	10/23/19 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*		*51 - 149*	*10/23/19 08:52*	*10/23/19 20:41*	*1*

Lab Sample ID: LCS 400-462775/2-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.102		ug/L		102	60 - 140
1,2-Dibromoethane	0.100	0.109		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*148*		*51 - 149*

Lab Sample ID: LCSD 400-462775/3-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.106		ug/L		106	60 - 140	4	30
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140	3	30

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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/9/19
PAGE: 1 of 1

NAME (NO COMPANY): AECOM
ENO 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
E-MAIL TO CONTACT: 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 - 1.03.004 / 60592794 - 1.03.0044
E-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
ALT. COM. METH.
SAMPLER NAME (S) (Print): B Howell B. Burleson
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 - 1.03.004 / UNIT COST 60592794 - 1.03.0044

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	FIELD NOTES: / Container PID Readings or Laboratory Notes
	TB-ROX-100919-8260-BP	10/9/19	0000	Water	X					2	2				TEMPERATURE ON RECEIPT C°
	TB-ROX-100919-8011-BP	↓	0000	↓	X					2			2		
	MW23-ROX-100919	↓	1055	↓	X			X		6	2	1	2	1	

Relinquished by (Signature): B Howell
Received by (Signature): 1155 5318 3366 1155 5318 3388 1155 5318 3403
Fedex: 1155 5318 3377 1155 5318 3399
Date: 10/9/19 Time: 1600

Relinquished by (Signature):
Received by (Signature): M Jadaway
Date: 10/10/19 Time: 919

Relinquished by (Signature):
Received by (Signature):
Date: Time:

Version: 14Dec15

1.3°C, 0.0°C, 0.5°C, 0.0°C, 1.5°C Custody Seal #s: 10906668 10906672 10906676
10906669 10906673 10906677
JP8

Page 34 of 36

11/4/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177791-2

Login Number: 177791
List Number: 1
Creator: Gore, Beija K

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	1090670,1090675,1090672,1090668,1090669,1090677,109067
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3 °C, 0.0°C ,1.5°C ,0.6°C ,0.0 °C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-177791-2

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177886-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/26/2019

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

Sample Identification	Sample Identification
TB-ROX-101019-8011	TB-ROX-101019-8260
MW6A-ROX-101019	MW6B-ROX-101019
MW6D-ROX-101019	MW6C-ROX-101019
MW6C-ROX-101019-Dup	MW2-ROX-101019-EB
MW2-ROX-101019	

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, and although not indicated in the laboratory case narrative, bis(2-ethylhexyl) phthalate was detected in equipment blank MW2-ROX-101019-EB. Several SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The PAH surrogate recovery for terphenyl-d_{14} was outside criteria in sample MW2-ROX-101019. Sample MW2-ROX-101019 was diluted to bring VOCs into calibration range of the instrument. The continuing calibration verifications for benzyl alcohol and hexachlorocyclopentadiene 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
MW2-ROX-101019-EB	SVOCs	bis(2-Ethylhexyl) phthalate	11 µg/L
MB 400-462088/1-A	PAHs	Benzo[a]pyrene	0.199 µg/L
MB 400-462088/1-A	PAHs	Benzo[b]fluoranthene	0.172 µg/L
MB 400-462088/1-A	PAHs	Benzo[k]fluoranthene	0.124 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 400-462088/20-A/21-A	SVOCs	Benzenethiol	**1/2**	17	10-120/30
LCS/LCSD 400-462088/2-A/3-A	SVOCs	Dibenz[a,h]acridine	48/71	**39**	31-150/30
LCS/LCSD 400-462088/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**5**/11	**71**	10-134/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol and hexachlorocyclopentadiene; benzenethiol and hexachlorocyclopentadiene have been identified as poor performing analytes under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-101019	SVOCs	Benzenethiol	**UJ**
MW6A-ROX-101019	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6B-ROX-101019	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-101019	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6D-ROX-101019	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-101019	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6C-ROX-101019	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-101019	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6C-ROX-101019-Dup	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-101019-Dup	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW2-ROX-101019	SVOCs	Benzenethiol	**UJ**
MW2-ROX-101019	SVOCs	Hexachlorocyclopentadiene	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW2-ROX-101019	PAHs	Terphenyl-d_{14}	**144**	33-138

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

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW6C-ROX-101019	MW6C-ROX-101019-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

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

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for hexachlorocyclopentadiene and benzyl alcohol were below acceptance criteria; qualifications due to CCV data are summarized in the following table. Hexachlorocyclopentadiene was qualified in Section 5.0 of this data review due to LCS/LCSD data outside evaluation criteria; no further qualification of hexachlorocyclopentadiene was required.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-101019	SVOCs	Benzyl alcohol	**UJ**
MW6B-ROX-101019	SVOCs	Benzyl alcohol	**UJ**
MW6D-ROX-101019	SVOCs	Benzyl alcohol	**UJ**
MW6C-ROX-101019	SVOCs	Benzyl alcohol	**UJ**
MW6C-ROX-101019-Dup	SVOCs	Benzyl alcohol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW2-ROX-101019	SVOCs	Benzyl alcohol	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-177886-1
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:
11/4/2019 9:43:29 AM

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

LINKS

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Reviewed 11/26/19 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.

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Case Narrative

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

Job ID: 400-177886-1

Job ID: 400-177886-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177886-1

Comments
No additional comments.

Receipt
The samples were received on 10/11/2019 8:48 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.0° C, 0.2° C, 0.5° C, 2.3° C and 4.8° C.

GC/MS VOA
Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101019-8260 (400-177886-2), MW6A-ROX-101019 (400-177886-3), MW6B-ROX-101019 (400-177886-4), MW6D-ROX-101019 (400-177886-5), MW6C-ROX-101019 (400-177886-6), MW6C-ROX-101019-DUP (400-177886-7), MW2-ROX-101019-EB (400-177886-8) and MW2-ROX-101019 (400-177886-9). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW2-ROX-101019 (400-177886-9). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-462088 and analytical batch 400-463747 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462088 and analytical batch 400-463747 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene and Dibenz[a,h]acridine.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463747 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Benzyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462088 and analytical batch 400-464197 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-462088 and analytical batch 400-463023 contained Benzo[b]fluoranthene, Benzo[k]fluoranthene and Benzo[a]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 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: MW2-ROX-101019 (400-177886-9). These results have been reported and qualified.

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

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

Organic Prep

Job ID: 400-177886-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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: 400-177886-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177886-1	TB-ROX-101019-8011	Water	10/10/19 00:00	10/11/19 08:48	
400-177886-2	TB-ROX-101019-8260	Water	10/10/19 00:00	10/11/19 08:48	
400-177886-3	MW6A-ROX-101019	Water	10/10/19 09:05	10/11/19 08:48	
400-177886-4	MW6B-ROX-101019	Water	10/10/19 09:45	10/11/19 08:48	
400-177886-5	MW6D-ROX-101019	Water	10/10/19 10:25	10/11/19 08:48	
400-177886-6	MW6C-ROX-101019	Water	10/10/19 11:00	10/11/19 08:48	
400-177886-7	MW6C-ROX-101019-DUP	Water	10/10/19 11:00	10/11/19 08:48	
400-177886-8	MW2-ROX-101019-EB	Water	10/10/19 12:35	10/11/19 08:48	
400-177886-9	MW2-ROX-101019	Water	10/10/19 13:15	10/11/19 08:48	

Detection Summary

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

Job ID: 400-177886-1

Client Sample ID: TB-ROX-101019-8011 — Lab Sample ID: 400-177886-1

No Detections.

Client Sample ID: TB-ROX-101019-8260 — Lab Sample ID: 400-177886-2

No Detections.

Client Sample ID: MW6A-ROX-101019 — Lab Sample ID: 400-177886-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.10	J	0.25	0.075	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW6B-ROX-101019 — Lab Sample ID: 400-177886-4

No Detections.

Client Sample ID: MW6D-ROX-101019 — Lab Sample ID: 400-177886-5

No Detections.

Client Sample ID: MW6C-ROX-101019 — Lab Sample ID: 400-177886-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	15		13	6.3	ug/L	1		8270D	Total/NA

Client Sample ID: MW6C-ROX-101019-DUP — Lab Sample ID: 400-177886-7

No Detections.

Client Sample ID: MW2-ROX-101019-EB — Lab Sample ID: 400-177886-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	11	J	13	6.3	ug/L	1		8270D	Total/NA

Client Sample ID: MW2-ROX-101019 — Lab Sample ID: 400-177886-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	630		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	60		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	380		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	65		5.0	5.0	ug/L	5		8260B	Total/NA
n-Butylbenzene	7.3		5.0	3.8	ug/L	5		8260B	Total/NA
N-Propylbenzene	81		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	35		25	3.0	ug/L	5		8260B	Total/NA
p-Isopropyltoluene	5.0		5.0	3.6	ug/L	5		8260B	Total/NA
sec-Butylbenzene	4.5	J	5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	8.4		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	150		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	68		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	420		50	8.0	ug/L	5		8260B	Total/NA
1-Methylnaphthalene	11		0.25	0.093	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	22		0.25	0.075	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	0.61	J	13	0.30	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: 400-177886-1

Client Sample ID: TB-ROX-101019-8011
Date Collected: 10/10/19 00:00
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-1
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		0.032	0.0058	ug/L		10/23/19 08:53	10/24/19 01:41	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		10/23/19 08:53	10/24/19 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*	*p*	*51 - 149*	*10/23/19 08:53*	*10/24/19 01:41*	*1*

Client Sample ID: TB-ROX-101019-8260

Lab Sample ID: 400-177886-2

Date Collected: 10/10/19 00:00
Date Received: 10/11/19 08:48

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			10/23/19 09:11	1
Acrolein	ND		20	10	ug/L			10/23/19 09:11	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 09:11	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 09:11	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 09:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 09:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 09:11	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 09:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 09:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 09:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 09:11	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 09:11	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 09:11	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 09:11	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 09:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 09:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 09:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 09:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 09:11	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 09:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 09:11	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 09:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 09:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 09:11	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 09:11	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 09:11	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 09:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 09:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 09:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 09:11	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 09:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 09:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 09:11	1

Client Sample ID: TB-ROX-101019-8260
Date Collected: 10/10/19 00:00
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-2
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			10/23/19 09:11	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 09:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 09:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 09:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 09:11	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 09:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 09:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 09:11	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:11	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 09:11	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 09:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 09:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 09:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 09:11	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 09:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 09:11	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 09:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*10/23/19 09:11*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*10/23/19 09:11*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/23/19 09:11*	*1*

Client Sample Results

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

Job ID: 400-177886-1

Client Sample ID: MW6A-ROX-101019
Date Collected: 10/10/19 09:05
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-3
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			10/23/19 13:42	1
Acrolein	ND		20	10	ug/L			10/23/19 13:42	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 13:42	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 13:42	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 13:42	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 13:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 13:42	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 13:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 13:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 13:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 13:42	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 13:42	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 13:42	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 13:42	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 13:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 13:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 13:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 13:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 13:42	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 13:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 13:42	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 13:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 13:42	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 13:42	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 13:42	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 13:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 13:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 13:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 13:42	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 13:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 13:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 13:42	1

Client Sample ID: MW6A-ROX-101019

Lab Sample ID: 400-177886-3

Date Collected: 10/10/19 09:05
Date Received: 10/11/19 08:48

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			10/23/19 13:42	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 13:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 13:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 13:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 13:42	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 13:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 13:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 13:42	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:42	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 13:42	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 13:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 13:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 13:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 13:42	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 13:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 13:42	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/23/19 13:42*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 13:42*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/23/19 13:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 17:58	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 17:58	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 17:58	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 17:58	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 17:58	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 17:58	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 17:58	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 17:58	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 17:58	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 17:58	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 17:58	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 17:58	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 17:58	1
1-Methylnaphthalene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 17:58	1
2-Methylnaphthalene	0.10	J	0.25	0.075	ug/L		10/17/19 23:47	10/24/19 17:58	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 17:58	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*115*		*33 - 138*	*10/17/19 23:47*	*10/24/19 17:58*	*1*
2-Fluorobiphenyl	*93*		*15 - 122*	*10/17/19 23:47*	*10/24/19 17:58*	*1*

Client Sample ID: MW6A-ROX-101019
Date Collected: 10/10/19 09:05
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	93		19 - 130	10/17/19 23:47	10/24/19 17:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 19:29	1
Benzenethiol	ND	* UJ	13	2.1	ug/L		10/17/19 23:47	11/01/19 17:38	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 19:29	1
Benzyl alcohol	ND	UJ	13	2.5	ug/L		10/17/19 23:47	10/30/19 19:29	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 19:29	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 19:29	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 19:29	1
Bis(2-ethylhexyl) phthalate	ND		13	6.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 19:29	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 19:29	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 19:29	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 19:29	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 19:29	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 19:29	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:29	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 19:29	1
Diethyl phthalate	ND		13	0.30	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:29	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:29	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 19:29	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 19:29	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:29	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:29	1
Hexachlorocyclopentadiene	ND	* UJ	25	3.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 19:29	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 19:29	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 19:29	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 19:29	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 19:29	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 19:29	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 19:29	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:29	1

Client Sample ID: MW6A-ROX-101019

Lab Sample ID: 400-177886-3

Date Collected: 10/10/19 09:05
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 19:29	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 19:29	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 19:29	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 19:29	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 19:29	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 19:29	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*65*		*17 - 127*	*10/17/19 23:47*	*10/30/19 19:29*	*1*
Terphenyl-d14	*84*		*44 - 149*	*10/17/19 23:47*	*10/30/19 19:29*	*1*
2,4,6-Tribromophenol	*81*		*26 - 150*	*10/17/19 23:47*	*10/30/19 19:29*	*1*
2-Fluorobiphenyl	*74*		*46 - 124*	*10/17/19 23:47*	*10/30/19 19:29*	*1*
2-Fluorophenol	*58*		*13 - 113*	*10/17/19 23:47*	*10/30/19 19:29*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*10/17/19 23:47*	*10/30/19 19:29*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/23/19 08:53	10/24/19 02:03	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/23/19 08:53	10/24/19 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*10/23/19 08:53*	*10/24/19 02:03*	*1*

Client Sample Results

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

Job ID: 400-177886-1

Client Sample ID: MW6B-ROX-101019
Date Collected: 10/10/19 09:45
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-4
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			10/23/19 14:06	1
Acrolein	ND		20	10	ug/L			10/23/19 14:06	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 14:06	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 14:06	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 14:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 14:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 14:06	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 14:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 14:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 14:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 14:06	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 14:06	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 14:06	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 14:06	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 14:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 14:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 14:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 14:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 14:06	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 14:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 14:06	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 14:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 14:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 14:06	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 14:06	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 14:06	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 14:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 14:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 14:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 14:06	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 14:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 14:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 14:06	1

Client Sample ID: MW6B-ROX-101019

Lab Sample ID: 400-177886-4

Date Collected: 10/10/19 09:45
Date Received: 10/11/19 08:48

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			10/23/19 14:06	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 14:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 14:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 14:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 14:06	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 14:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 14:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 14:06	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:06	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 14:06	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 14:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 14:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 14:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 14:06	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 14:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 14:06	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/23/19 14:06*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 14:06*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 14:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 19:17	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 19:17	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 19:17	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 19:17	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 19:17	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 19:17	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 19:17	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 19:17	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 19:17	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 19:17	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 19:17	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 19:17	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 19:17	1
1-Methylnaphthalene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 19:17	1
2-Methylnaphthalene	ND		0.25	0.075	ug/L		10/17/19 23:47	10/24/19 19:17	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 19:17	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*122*		*33 - 138*	*10/17/19 23:47*	*10/24/19 19:17*	*1*
2-Fluorobiphenyl	*101*		*15 - 122*	*10/17/19 23:47*	*10/24/19 19:17*	*1*

Client Sample ID: MW6B-ROX-101019

Lab Sample ID: 400-177886-4
Matrix: Water

Date Collected: 10/10/19 09:45
Date Received: 10/11/19 08:48

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	103		19 - 130	10/17/19 23:47	10/24/19 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 17:19	1
Benzenethiol	ND	* UJ	13	2.1	ug/L		10/17/19 23:47	11/01/19 18:00	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 17:19	1
Benzyl alcohol	ND	UJ	13	2.5	ug/L		10/17/19 23:47	10/30/19 17:19	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 17:19	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 17:19	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 17:19	1
Bis(2-ethylhexyl) phthalate	ND		13	6.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 17:19	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 17:19	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 17:19	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 17:19	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 17:19	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 17:19	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:19	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 17:19	1
Diethyl phthalate	ND		13	0.30	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 17:19	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:19	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 17:19	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 17:19	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:19	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:19	1
Hexachlorocyclopentadiene	ND	* UJ	25	3.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 17:19	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 17:19	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 17:19	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 17:19	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 17:19	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 17:19	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 17:19	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 17:19	1

Client Sample ID: MW6B-ROX-101019

Lab Sample ID: 400-177886-4

Date Collected: 10/10/19 09:45
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 17:19	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 17:19	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 17:19	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 17:19	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 17:19	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 17:19	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*68*		*17 - 127*	*10/17/19 23:47*	*10/30/19 17:19*	*1*
Terphenyl-d14	*95*		*44 - 149*	*10/17/19 23:47*	*10/30/19 17:19*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*10/17/19 23:47*	*10/30/19 17:19*	*1*
2-Fluorobiphenyl	*78*		*46 - 124*	*10/17/19 23:47*	*10/30/19 17:19*	*1*
2-Fluorophenol	*54*		*13 - 113*	*10/17/19 23:47*	*10/30/19 17:19*	*1*
Nitrobenzene-d5	*74*		*36 - 126*	*10/17/19 23:47*	*10/30/19 17:19*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		10/23/19 08:53	10/24/19 02:26	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/23/19 08:53	10/24/19 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*10/23/19 08:53*	*10/24/19 02:26*	*1*

Client Sample Results

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

Job ID: 400-177886-1

Client Sample ID: MW6D-ROX-101019
Date Collected: 10/10/19 10:25
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-5
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			10/23/19 14:32	1
Acrolein	ND		20	10	ug/L			10/23/19 14:32	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 14:32	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 14:32	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 14:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 14:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 14:32	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 14:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 14:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 14:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 14:32	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 14:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 14:32	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 14:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 14:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 14:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 14:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 14:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 14:32	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 14:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 14:32	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 14:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 14:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 14:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 14:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 14:32	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 14:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 14:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 14:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 14:32	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 14:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 14:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 14:32	1

Client Sample ID: MW6D-ROX-101019

Lab Sample ID: 400-177886-5

Date Collected: 10/10/19 10:25
Date Received: 10/11/19 08:48

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			10/23/19 14:32	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 14:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 14:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 14:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 14:32	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 14:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 14:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 14:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 14:32	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 14:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 14:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 14:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 14:32	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 14:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 14:32	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/23/19 14:32*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 14:32*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/23/19 14:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 18:46	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 18:46	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 18:46	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 18:46	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 18:46	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 18:46	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 18:46	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 18:46	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 18:46	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 18:46	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 18:46	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 18:46	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 18:46	1
1-Methylnaphthalene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 18:46	1
2-Methylnaphthalene	ND		0.25	0.075	ug/L		10/17/19 23:47	10/24/19 18:46	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 18:46	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*132*		*33 - 138*	*10/17/19 23:47*	*10/24/19 18:46*	*1*
2-Fluorobiphenyl	*101*		*15 - 122*	*10/17/19 23:47*	*10/24/19 18:46*	*1*

Client Sample ID: MW6D-ROX-101019

Lab Sample ID: 400-177886-5
Matrix: Water

Date Collected: 10/10/19 10:25
Date Received: 10/11/19 08:48

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	103		19 - 130	10/17/19 23:47	10/24/19 18:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 17:45	1
Benzenethiol	ND	* UJ	13	2.1	ug/L		10/17/19 23:47	11/01/19 18:21	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 17:45	1
Benzyl alcohol	ND	UJ	13	2.5	ug/L		10/17/19 23:47	10/30/19 17:45	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 17:45	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 17:45	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 17:45	1
Bis(2-ethylhexyl) phthalate	ND		13	6.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 17:45	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 17:45	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 17:45	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 17:45	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 17:45	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 17:45	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:45	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 17:45	1
Diethyl phthalate	ND		13	0.30	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 17:45	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:45	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 17:45	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 17:45	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:45	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 17:45	1
Hexachlorocyclopentadiene	ND	* UJ	25	3.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 17:45	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 17:45	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 17:45	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 17:45	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 17:45	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 17:45	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 17:45	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 17:45	1

Client Sample ID: MW6D-ROX-101019

Lab Sample ID: 400-177886-5

Date Collected: 10/10/19 10:25
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 17:45	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 17:45	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 17:45	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 17:45	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 17:45	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 17:45	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*65*		*17 - 127*	*10/17/19 23:47*	*10/30/19 17:45*	*1*
Terphenyl-d14	*85*		*44 - 149*	*10/17/19 23:47*	*10/30/19 17:45*	*1*
2,4,6-Tribromophenol	*68*		*26 - 150*	*10/17/19 23:47*	*10/30/19 17:45*	*1*
2-Fluorobiphenyl	*71*		*46 - 124*	*10/17/19 23:47*	*10/30/19 17:45*	*1*
2-Fluorophenol	*55*		*13 - 113*	*10/17/19 23:47*	*10/30/19 17:45*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*10/17/19 23:47*	*10/30/19 17:45*	*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		0.029	0.0053	ug/L		10/23/19 08:53	10/24/19 02:49	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		10/23/19 08:53	10/24/19 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*10/23/19 08:53*	*10/24/19 02:49*	*1*

Client Sample Results

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

Job ID: 400-177886-1

Client Sample ID: MW6C-ROX-101019

Lab Sample ID: 400-177886-6

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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			10/23/19 14:58	1
Acrolein	ND		20	10	ug/L			10/23/19 14:58	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 14:58	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 14:58	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 14:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 14:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 14:58	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 14:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 14:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 14:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 14:58	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 14:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 14:58	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 14:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 14:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 14:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 14:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 14:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 14:58	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 14:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 14:58	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 14:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 14:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 14:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 14:58	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 14:58	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 14:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 14:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 14:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 14:58	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 14:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 14:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 14:58	1

Client Sample ID: MW6C-ROX-101019

Lab Sample ID: 400-177886-6

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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			10/23/19 14:58	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 14:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 14:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 14:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 14:58	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 14:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 14:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 14:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 14:58	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 14:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 14:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 14:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 14:58	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 14:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 14:58	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/23/19 14:58*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 14:58*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/23/19 14:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 19:01	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 19:01	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 19:01	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 19:01	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 19:01	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 19:01	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 19:01	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 19:01	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 19:01	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 19:01	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 19:01	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 19:01	1
1-Methylnaphthalene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 19:01	1
2-Methylnaphthalene	ND		0.25	0.075	ug/L		10/17/19 23:47	10/24/19 19:01	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 19:01	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*121*		*33 - 138*	*10/17/19 23:47*	*10/24/19 19:01*	*1*
2-Fluorobiphenyl	*95*		*15 - 122*	*10/17/19 23:47*	*10/24/19 19:01*	*1*

Client Sample ID: MW6C-ROX-101019
Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	68		19 - 130	10/17/19 23:47	10/24/19 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 18:11	1
Benzenethiol	ND	* UJ	13	2.1	ug/L		10/17/19 23:47	11/01/19 18:43	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 18:11	1
Benzyl alcohol	ND	UJ	13	2.5	ug/L		10/17/19 23:47	10/30/19 18:11	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 18:11	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 18:11	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 18:11	1
Bis(2-ethylhexyl) phthalate	15		13	6.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 18:11	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 18:11	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 18:11	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 18:11	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 18:11	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 18:11	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:11	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 18:11	1
Diethyl phthalate	ND		13	0.30	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 18:11	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:11	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 18:11	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 18:11	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:11	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:11	1
Hexachlorocyclopentadiene	ND	* UJ	25	3.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 18:11	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 18:11	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 18:11	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 18:11	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 18:11	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 18:11	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 18:11	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 18:11	1

Client Sample ID: MW6C-ROX-101019

Lab Sample ID: 400-177886-6

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 18:11	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 18:11	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 18:11	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 18:11	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 18:11	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 18:11	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*61*		*17 - 127*	*10/17/19 23:47*	*10/30/19 18:11*	*1*
Terphenyl-d14	*91*		*44 - 149*	*10/17/19 23:47*	*10/30/19 18:11*	*1*
2,4,6-Tribromophenol	*44*		*26 - 150*	*10/17/19 23:47*	*10/30/19 18:11*	*1*
2-Fluorobiphenyl	*78*		*46 - 124*	*10/17/19 23:47*	*10/30/19 18:11*	*1*
2-Fluorophenol	*25*		*13 - 113*	*10/17/19 23:47*	*10/30/19 18:11*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*10/17/19 23:47*	*10/30/19 18:11*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/23/19 08:53	10/24/19 03:11	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/23/19 08:53	10/24/19 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*10/23/19 08:53*	*10/24/19 03:11*	*1*

Client Sample Results

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

Job ID: 400-177886-1

Client Sample ID: MW6C-ROX-101019-DUP

Lab Sample ID: 400-177886-7

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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			10/23/19 15:24	1
Acrolein	ND		20	10	ug/L			10/23/19 15:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 15:24	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 15:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 15:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 15:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 15:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 15:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 15:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 15:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 15:24	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 15:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 15:24	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 15:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 15:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 15:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 15:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 15:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 15:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 15:24	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 15:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 15:24	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 15:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 15:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 15:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 15:24	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 15:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 15:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 15:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 15:24	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 15:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 15:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 15:24	1

Client Sample ID: MW6C-ROX-101019-DUP

Lab Sample ID: 400-177886-7

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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			10/23/19 15:24	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 15:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 15:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 15:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 15:24	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 15:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 15:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 15:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 15:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 15:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 15:24	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 15:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 15:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 15:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 15:24	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 15:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 15:24	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/23/19 15:24*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*10/23/19 15:24*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/23/19 15:24*	*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		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 19:33	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 19:33	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 19:33	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 19:33	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 19:33	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 19:33	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 19:33	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 19:33	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 19:33	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 19:33	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 19:33	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 19:33	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 19:33	1
1-Methylnaphthalene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 19:33	1
2-Methylnaphthalene	ND		0.25	0.075	ug/L		10/17/19 23:47	10/24/19 19:33	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 19:33	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*129*		*33 - 138*	*10/17/19 23:47*	*10/24/19 19:33*	*1*
2-Fluorobiphenyl	*101*		*15 - 122*	*10/17/19 23:47*	*10/24/19 19:33*	*1*

Client Sample ID: MW6C-ROX-101019-DUP

Lab Sample ID: 400-177886-7

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	102		19 - 130	10/17/19 23:47	10/24/19 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 18:37	1
Benzenethiol	ND	* UJ	13	2.1	ug/L		10/17/19 23:47	11/01/19 19:05	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 18:37	1
Benzyl alcohol	ND	UJ	13	2.5	ug/L		10/17/19 23:47	10/30/19 18:37	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 18:37	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 18:37	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 18:37	1
Bis(2-ethylhexyl) phthalate	ND		13	6.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 18:37	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 18:37	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 18:37	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 18:37	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 18:37	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 18:37	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:37	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 18:37	1
Diethyl phthalate	ND		13	0.30	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 18:37	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:37	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 18:37	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 18:37	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:37	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 18:37	1
Hexachlorocyclopentadiene	ND	* UJ	25	3.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 18:37	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 18:37	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 18:37	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 18:37	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 18:37	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 18:37	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 18:37	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 18:37	1

Client Sample ID: MW6C-ROX-101019-DUP

Lab Sample ID: 400-177886-7

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 18:37	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 18:37	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 18:37	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 18:37	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 18:37	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 18:37	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*69*		*17 - 127*	*10/17/19 23:47*	*10/30/19 18:37*	*1*
Terphenyl-d14	*89*		*44 - 149*	*10/17/19 23:47*	*10/30/19 18:37*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*10/17/19 23:47*	*10/30/19 18:37*	*1*
2-Fluorobiphenyl	*78*		*46 - 124*	*10/17/19 23:47*	*10/30/19 18:37*	*1*
2-Fluorophenol	*57*		*13 - 113*	*10/17/19 23:47*	*10/30/19 18:37*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*10/17/19 23:47*	*10/30/19 18:37*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0056	ug/L		10/23/19 08:53	10/24/19 03:34	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		10/23/19 08:53	10/24/19 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*10/23/19 08:53*	*10/24/19 03:34*	*1*

Client Sample ID: MW2-ROX-101019-EB

Lab Sample ID: 400-177886-8

Date Collected: 10/10/19 12:35
Date Received: 10/11/19 08:48

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			10/23/19 09:35	1
Acrolein	ND		20	10	ug/L			10/23/19 09:35	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 09:35	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 09:35	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 09:35	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 09:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 09:35	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 09:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 09:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 09:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 09:35	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 09:35	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 09:35	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 09:35	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 09:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 09:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 09:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 09:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 09:35	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 09:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 09:35	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 09:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 09:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 09:35	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 09:35	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 09:35	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 09:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 09:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 09:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 09:35	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 09:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 09:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 09:35	1

Client Sample ID: MW2-ROX-101019-EB

Lab Sample ID: 400-177886-8

Date Collected: 10/10/19 12:35
Date Received: 10/11/19 08:48

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			10/23/19 09:35	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 09:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 09:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 09:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 09:35	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 09:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 09:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 09:35	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:35	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 09:35	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 09:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 09:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 09:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 09:35	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 09:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 09:35	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/23/19 09:35*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 09:35*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 09:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 18:14	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 18:14	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 18:14	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 18:14	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 18:14	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 18:14	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 18:14	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 18:14	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 18:14	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 18:14	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 18:14	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 18:14	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 18:14	1
1-Methylnaphthalene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 18:14	1
2-Methylnaphthalene	ND		0.25	0.075	ug/L		10/17/19 23:47	10/24/19 18:14	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 18:14	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*33 - 138*	*10/17/19 23:47*	*10/24/19 18:14*	*1*
2-Fluorobiphenyl	*80*		*15 - 122*	*10/17/19 23:47*	*10/24/19 18:14*	*1*

Client Sample ID: MW2-ROX-101019-EB

Lab Sample ID: 400-177886-8

Date Collected: 10/10/19 12:35
Date Received: 10/11/19 08:48

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	10/17/19 23:47	10/24/19 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 19:03	1
Benzenethiol	ND	*	13	2.1	ug/L		10/17/19 23:47	11/01/19 19:26	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 19:03	1
Benzyl alcohol	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 19:03	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 19:03	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 19:03	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 19:03	1
Bis(2-ethylhexyl) phthalate	11	J	13	6.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 19:03	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 19:03	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 19:03	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 19:03	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 19:03	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 19:03	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:03	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 19:03	1
Diethyl phthalate	ND		13	0.30	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:03	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:03	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 19:03	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 19:03	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:03	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:03	1
Hexachlorocyclopentadiene	ND	*	25	3.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 19:03	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 19:03	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 19:03	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 19:03	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 19:03	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 19:03	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 19:03	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:03	1

Client Sample ID: MW2-ROX-101019-EB

Lab Sample ID: 400-177886-8

Date Collected: 10/10/19 12:35
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 19:03	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 19:03	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 19:03	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 19:03	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 19:03	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 19:03	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*58*		*17 - 127*	*10/17/19 23:47*	*10/30/19 19:03*	*1*
Terphenyl-d14	*77*		*44 - 149*	*10/17/19 23:47*	*10/30/19 19:03*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*10/17/19 23:47*	*10/30/19 19:03*	*1*
2-Fluorobiphenyl	*67*		*46 - 124*	*10/17/19 23:47*	*10/30/19 19:03*	*1*
2-Fluorophenol	*51*		*13 - 113*	*10/17/19 23:47*	*10/30/19 19:03*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*10/17/19 23:47*	*10/30/19 19:03*	*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		10/23/19 08:53	10/24/19 03:57	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/23/19 08:53	10/24/19 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*	*p*	*51 - 149*	*10/23/19 08:53*	*10/24/19 03:57*	*1*

Client Sample Results

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

Job ID: 400-177886-1

Client Sample ID: MW2-ROX-101019

Lab Sample ID: 400-177886-9

Date Collected: 10/10/19 13:15
Date Received: 10/11/19 08:48

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			10/23/19 11:14	5
Acrolein	ND		100	50	ug/L			10/23/19 11:14	5
Acrylonitrile	ND		50	14	ug/L			10/23/19 11:14	5
Benzene	ND		5.0	1.9	ug/L			10/23/19 11:14	5
Bromobenzene	ND		5.0	2.7	ug/L			10/23/19 11:14	5
Bromochloromethane	ND		5.0	2.6	ug/L			10/23/19 11:14	5
Bromodichloromethane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Bromoform	ND		25	3.6	ug/L			10/23/19 11:14	5
Bromomethane	ND		5.0	4.9	ug/L			10/23/19 11:14	5
2-Butanone (MEK)	ND		130	13	ug/L			10/23/19 11:14	5
Carbon disulfide	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Chlorobenzene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Dibromochloromethane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Chloroethane	ND		5.0	3.8	ug/L			10/23/19 11:14	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			10/23/19 11:14	5
Chloroform	ND		5.0	3.0	ug/L			10/23/19 11:14	5
1-Chlorohexane	ND		5.0	3.5	ug/L			10/23/19 11:14	5
Chloromethane	ND		5.0	4.2	ug/L			10/23/19 11:14	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			10/23/19 11:14	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			10/23/19 11:14	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			10/23/19 11:14	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			10/23/19 11:14	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Ethylbenzene	630		5.0	2.5	ug/L			10/23/19 11:14	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			10/23/19 11:14	5
Hexachlorobutadiene	ND		25	4.5	ug/L			10/23/19 11:14	5
2-Hexanone	ND		130	16	ug/L			10/23/19 11:14	5
Isopropylbenzene	60		5.0	2.7	ug/L			10/23/19 11:14	5
Methylene bromide	ND		25	3.0	ug/L			10/23/19 11:14	5
Methylene Chloride	ND		25	15	ug/L			10/23/19 11:14	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			10/23/19 11:14	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			10/23/19 11:14	5
m-Xylene & p-Xylene	380		25	8.0	ug/L			10/23/19 11:14	5
Naphthalene	65		5.0	5.0	ug/L			10/23/19 11:14	5
n-Butylbenzene	7.3		5.0	3.8	ug/L			10/23/19 11:14	5
N-Propylbenzene	81		5.0	3.5	ug/L			10/23/19 11:14	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			10/23/19 11:14	5
o-Xylene	35		25	3.0	ug/L			10/23/19 11:14	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			10/23/19 11:14	5
p-Isopropyltoluene	5.0		5.0	3.6	ug/L			10/23/19 11:14	5

Client Sample ID: MW2-ROX-101019
Date Collected: 10/10/19 13:15
Date Received: 10/11/19 08:48

Lab Sample ID: 400-177886-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	4.5	J	5.0	3.5	ug/L			10/23/19 11:14	5
Styrene	ND		5.0	5.0	ug/L			10/23/19 11:14	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			10/23/19 11:14	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			10/23/19 11:14	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Tetrachloroethene	ND		5.0	2.9	ug/L			10/23/19 11:14	5
Toluene	8.4		5.0	2.1	ug/L			10/23/19 11:14	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			10/23/19 11:14	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			10/23/19 11:14	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			10/23/19 11:14	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			10/23/19 11:14	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			10/23/19 11:14	5
Trichloroethene	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			10/23/19 11:14	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			10/23/19 11:14	5
1,2,4-Trimethylbenzene	150		5.0	4.1	ug/L			10/23/19 11:14	5
1,3,5-Trimethylbenzene	68		5.0	2.8	ug/L			10/23/19 11:14	5
Vinyl acetate	ND		130	10	ug/L			10/23/19 11:14	5
Vinyl chloride	ND		5.0	2.5	ug/L			10/23/19 11:14	5
Xylenes, Total	420		50	8.0	ug/L			10/23/19 11:14	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/23/19 11:14*	*5*
Dibromofluoromethane	*93*		*81 - 121*		*10/23/19 11:14*	*5*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 11:14*	*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		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 18:30	1
Acenaphthylene	ND		0.25	0.056	ug/L		10/17/19 23:47	10/24/19 18:30	1
Anthracene	ND		0.25	0.040	ug/L		10/17/19 23:47	10/24/19 18:30	1
Benzo[a]anthracene	ND		0.25	0.058	ug/L		10/17/19 23:47	10/24/19 18:30	1
Benzo[a]pyrene	ND		0.25	0.053	ug/L		10/17/19 23:47	10/24/19 18:30	1
Benzo[b]fluoranthene	ND		0.25	0.043	ug/L		10/17/19 23:47	10/24/19 18:30	1
Benzo[g,h,i]perylene	ND		0.25	0.16	ug/L		10/17/19 23:47	10/24/19 18:30	1
Benzo[k]fluoranthene	ND		0.25	0.13	ug/L		10/17/19 23:47	10/24/19 18:30	1
Chrysene	ND		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 18:30	1
Dibenz(a,h)anthracene	ND		0.25	0.063	ug/L		10/17/19 23:47	10/24/19 18:30	1
Fluoranthene	ND		0.25	0.085	ug/L		10/17/19 23:47	10/24/19 18:30	1
Fluorene	ND		0.25	0.14	ug/L		10/17/19 23:47	10/24/19 18:30	1
Indeno[1,2,3-cd]pyrene	ND		0.25	0.054	ug/L		10/17/19 23:47	10/24/19 18:30	1
1-Methylnaphthalene	11		0.25	0.093	ug/L		10/17/19 23:47	10/24/19 18:30	1
2-Methylnaphthalene	22		0.25	0.075	ug/L		10/17/19 23:47	10/24/19 18:30	1
Phenanthrene	ND		0.25	0.045	ug/L		10/17/19 23:47	10/24/19 18:30	1
Pyrene	ND		0.25	0.050	ug/L		10/17/19 23:47	10/24/19 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*144*	*X*	*33 - 138*	*10/17/19 23:47*	*10/24/19 18:30*	*1*
2-Fluorobiphenyl	*108*		*15 - 122*	*10/17/19 23:47*	*10/24/19 18:30*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	119		19 - 130	10/17/19 23:47	10/24/19 18:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 19:55	1
Benzenethiol	ND	* UJ	13	2.1	ug/L		10/17/19 23:47	11/01/19 19:48	1
Benzoic acid	ND		38	9.1	ug/L		10/17/19 23:47	10/30/19 19:55	1
Benzyl alcohol	ND	UJ	13	2.5	ug/L		10/17/19 23:47	10/30/19 19:55	1
Bis(2-chloroethoxy)methane	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 19:55	1
Bis(2-chloroethyl)ether	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 19:55	1
bis (2-chloroisopropyl) ether	ND		13	0.20	ug/L		10/17/19 23:47	10/30/19 19:55	1
Bis(2-ethylhexyl) phthalate	ND		13	6.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
4-Bromophenyl phenyl ether	ND		13	0.25	ug/L		10/17/19 23:47	10/30/19 19:55	1
Butyl benzyl phthalate	ND		13	0.24	ug/L		10/17/19 23:47	10/30/19 19:55	1
4-Chloroaniline	ND		13	4.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
4-Chloro-3-methylphenol	ND		13	4.8	ug/L		10/17/19 23:47	10/30/19 19:55	1
2-Chloronaphthalene	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 19:55	1
2-Chlorophenol	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 19:55	1
4-Chlorophenyl phenyl ether	ND		13	2.5	ug/L		10/17/19 23:47	10/30/19 19:55	1
Dibenz[a,h]acridine	ND	*	13	1.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
Dibenzofuran	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:55	1
3,3'-Dichlorobenzidine	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,4-Dichlorophenol	ND		13	3.8	ug/L		10/17/19 23:47	10/30/19 19:55	1
Diethyl phthalate	0.61	J	13	0.30	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,4-Dimethylphenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:55	1
Dimethyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:55	1
Di-n-butyl phthalate	ND		13	3.4	ug/L		10/17/19 23:47	10/30/19 19:55	1
4,6-Dinitro-ortho-cresol	ND		13	2.0	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,4-Dinitrophenol	ND		38	4.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,4-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,6-Dinitrotoluene	ND		13	2.4	ug/L		10/17/19 23:47	10/30/19 19:55	1
Di-n-octyl phthalate	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:55	1
1,4-Dioxane	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
Hexachlorobenzene	ND		13	0.21	ug/L		10/17/19 23:47	10/30/19 19:55	1
Hexachlorocyclopentadiene	ND	* UJ	25	3.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
Hexachloroethane	ND		13	5.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
Indene	ND		13	1.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
Isophorone	ND		13	0.18	ug/L		10/17/19 23:47	10/30/19 19:55	1
2-Methylphenol	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
3 & 4 Methylphenol	ND		25	0.49	ug/L		10/17/19 23:47	10/30/19 19:55	1
2-Nitroaniline	ND		13	2.8	ug/L		10/17/19 23:47	10/30/19 19:55	1
3-Nitroaniline	ND		13	2.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
4-Nitroaniline	ND		13	1.9	ug/L		10/17/19 23:47	10/30/19 19:55	1
Nitrobenzene	ND		13	0.16	ug/L		10/17/19 23:47	10/30/19 19:55	1
2-Nitrophenol	ND		13	6.5	ug/L		10/17/19 23:47	10/30/19 19:55	1
4-Nitrophenol	ND		13	2.6	ug/L		10/17/19 23:47	10/30/19 19:55	1
N-Nitrosodimethylamine	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:55	1

Client Sample ID: MW2-ROX-101019

Lab Sample ID: 400-177886-9

Date Collected: 10/10/19 13:15
Date Received: 10/11/19 08:48

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		13	4.1	ug/L		10/17/19 23:47	10/30/19 19:55	1
N-Nitrosodiphenylamine	ND		13	0.23	ug/L		10/17/19 23:47	10/30/19 19:55	1
Pentachlorophenol	ND		25	1.8	ug/L		10/17/19 23:47	10/30/19 19:55	1
Phenol	ND		13	3.3	ug/L		10/17/19 23:47	10/30/19 19:55	1
Pyridine	ND		13	4.0	ug/L		10/17/19 23:47	10/30/19 19:55	1
Quinoline	ND		13	5.6	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,4,5-Trichlorophenol	ND		13	4.6	ug/L		10/17/19 23:47	10/30/19 19:55	1
2,4,6-Trichlorophenol	ND		13	4.4	ug/L		10/17/19 23:47	10/30/19 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*78*		*17 - 127*	*10/17/19 23:47*	*10/30/19 19:55*	*1*
Terphenyl-d14	*95*		*44 - 149*	*10/17/19 23:47*	*10/30/19 19:55*	*1*
2,4,6-Tribromophenol	*73*		*26 - 150*	*10/17/19 23:47*	*10/30/19 19:55*	*1*
2-Fluorobiphenyl	*80*		*46 - 124*	*10/17/19 23:47*	*10/30/19 19:55*	*1*
2-Fluorophenol	*66*		*13 - 113*	*10/17/19 23:47*	*10/30/19 19:55*	*1*
Nitrobenzene-d5	*81*		*36 - 126*	*10/17/19 23:47*	*10/30/19 19:55*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		10/23/19 08:53	10/24/19 04:20	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/23/19 08:53	10/24/19 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*10/23/19 08:53*	*10/24/19 04:20*	*1*

Definitions/Glossary

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

Job ID: 400-177886-1

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
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: 400-177886-1

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)
400-177886-2	TB-ROX-101019-8260	91	93	95
400-177886-3	MW6A-ROX-101019	92	94	95
400-177886-4	MW6B-ROX-101019	93	94	96
400-177886-5	MW6D-ROX-101019	92	94	95
400-177886-6	MW6C-ROX-101019	92	94	94
400-177886-7	MW6C-ROX-101019-DUP	92	97	94
400-177886-8	MW2-ROX-101019-EB	94	94	96
400-177886-9	MW2-ROX-101019	94	93	96
LCS 400-462753/1002	Lab Control Sample	94	94	96
MB 400-462753/4	Method Blank	93	94	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		PHL	TPHL	TBP	FBP	2FP	NBZ
Lab Sample ID	Client Sample ID	(17-127)	(44-149)	(26-150)	(46-124)	(13-113)	(36-126)
400-177886-3	MW6A-ROX-101019	65	84	81	74	58	66
400-177886-4	MW6B-ROX-101019	68	95	80	78	54	74
400-177886-5	MW6D-ROX-101019	65	85	68	71	55	66
400-177886-6	MW6C-ROX-101019	61	91	44	78	25	72
400-177886-7	MW6C-ROX-101019-DUP	69	89	75	78	57	71
400-177886-8	MW2-ROX-101019-EB	58	77	62	67	51	58
400-177886-9	MW2-ROX-101019	78	95	73	80	66	81
LCS 400-462088/20-A	Lab Control Sample	48	80	68	56	39	50
LCS 400-462088/2-A	Lab Control Sample	67	79	74	72	51	71
LCSD 400-462088/21-A	Lab Control Sample Dup	50	84	66	58	41	51
LCSD 400-462088/3-A	Lab Control Sample Dup	63	79	70	71	58	71
MB 400-462088/1-A	Method Blank	66	84	57	72	57	67

Surrogate Legend

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

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)
400-177886-3	MW6A-ROX-101019	115	93	93
400-177886-4	MW6B-ROX-101019	122	101	103

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-177886-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TPHL (33-138)	FBP (15-122)	NBZ (19-130)
400-177886-5	MW6D-ROX-101019	132	101	103
400-177886-6	MW6C-ROX-101019	121	95	68
400-177886-7	MW6C-ROX-101019-DUP	129	101	102
400-177886-8	MW2-ROX-101019-EB	109	80	77
400-177886-9	MW2-ROX-101019	144 X	108	119
LCS 400-462088/2-A	Lab Control Sample	96	95	80
LCSD 400-462088/3-A	Lab Control Sample Dup	93	86	81
MB 400-462088/1-A	Method Blank	117	88	90

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)
400-177886-1	TB-ROX-101019-8011	85 p
400-177886-3	MW6A-ROX-101019	92
400-177886-4	MW6B-ROX-101019	88
400-177886-5	MW6D-ROX-101019	88
400-177886-6	MW6C-ROX-101019	98
400-177886-7	MW6C-ROX-101019-DUP	113
400-177886-8	MW2-ROX-101019-EB	75 p
400-177886-9	MW2-ROX-101019	82
LCS 400-462775/2-A	Lab Control Sample	148
LCSD 400-462775/3-A	Lab Control Sample Dup	91
MB 400-462775/1-A	Method Blank	145

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177886-1

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: 400-177886-1

Client Sample ID: TB-ROX-101019-8011

Lab Sample ID: 400-177886-1
Matrix: Water

Date Collected: 10/10/19 00:00
Date Received: 10/11/19 08:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.1 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 01:41	DS	TAL PEN

Client Sample ID: TB-ROX-101019-8260

Lab Sample ID: 400-177886-2
Matrix: Water

Date Collected: 10/10/19 00:00
Date Received: 10/11/19 08:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 09:11	PEM	TAL PEN

Client Sample ID: MW6A-ROX-101019

Lab Sample ID: 400-177886-3
Matrix: Water

Date Collected: 10/10/19 09:05
Date Received: 10/11/19 08:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 13:42	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 17:38	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 19:29	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 17:58	PP1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 02:03	DS	TAL PEN

Client Sample ID: MW6B-ROX-101019

Lab Sample ID: 400-177886-4
Matrix: Water

Date Collected: 10/10/19 09:45
Date Received: 10/11/19 08:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 14:06	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 18:00	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 17:19	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 19:17	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 02:26	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-177886-1

Client Sample ID: MW6D-ROX-101019

Lab Sample ID: 400-177886-5

Date Collected: 10/10/19 10:25
Date Received: 10/11/19 08:48

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	462753	10/23/19 14:32	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 18:21	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 17:45	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 18:46	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 02:49	DS	TAL PEN

Client Sample ID: MW6C-ROX-101019

Lab Sample ID: 400-177886-6

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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	462753	10/23/19 14:58	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 18:43	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 18:11	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 19:01	PP1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 03:11	DS	TAL PEN

Client Sample ID: MW6C-ROX-101019-DUP

Lab Sample ID: 400-177886-7

Date Collected: 10/10/19 11:00
Date Received: 10/11/19 08:48

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	462753	10/23/19 15:24	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 19:05	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 18:37	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 19:33	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 03:34	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-177886-1

Client Sample ID: MW2-ROX-101019-EB

Lab Sample ID: 400-177886-8

Date Collected: 10/10/19 12:35
Date Received: 10/11/19 08:48

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	462753	10/23/19 09:35	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 19:26	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 19:03	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 18:14	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 03:57	DS	TAL PEN

Client Sample ID: MW2-ROX-101019

Lab Sample ID: 400-177886-9

Date Collected: 10/10/19 13:15
Date Received: 10/11/19 08:48

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	462753	10/23/19 11:14	PEM	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 19:48	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 19:55	VC1	TAL PEN
Total/NA	Prep	3520C			200 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 18:30	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	462775	10/23/19 08:53	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 04:20	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462088/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 16:33	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 14:43	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/24/19 17:11	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462753/4

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	462753	10/23/19 08:47	PEM	TAL PEN

Lab Chronicle

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

Job ID: 400-177886-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462775/1-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 20:41	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462088/20-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			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 16:54	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462088/2-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 15:09	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			463023	10/24/19 17:27	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462753/1002

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	462753	10/23/19 07:59	PEM	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462775/2-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:04	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462088/21-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			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			464197	11/01/19 17:16	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177886-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462088/3-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D		1			463747	10/30/19 15:35	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	462088	10/17/19 23:47	BNL	TAL PEN
Total/NA	Analysis	8270D LL		5			463023	10/24/19 17:42	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462775/3-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	462775	10/23/19 08:52	TMB	TAL PEN
Total/NA	Analysis	8011		1			462889	10/23/19 21:28	DS	TAL PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-177886-1

GC/MS VOA

Analysis Batch: 462753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-2	TB-ROX-101019-8260	Total/NA	Water	8260B	
400-177886-3	MW6A-ROX-101019	Total/NA	Water	8260B	
400-177886-4	MW6B-ROX-101019	Total/NA	Water	8260B	
400-177886-5	MW6D-ROX-101019	Total/NA	Water	8260B	
400-177886-6	MW6C-ROX-101019	Total/NA	Water	8260B	
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	8260B	
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	8260B	
400-177886-9	MW2-ROX-101019	Total/NA	Water	8260B	
MB 400-462753/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462753/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 462088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-3	MW6A-ROX-101019	Total/NA	Water	3520C	
400-177886-4	MW6B-ROX-101019	Total/NA	Water	3520C	
400-177886-5	MW6D-ROX-101019	Total/NA	Water	3520C	
400-177886-6	MW6C-ROX-101019	Total/NA	Water	3520C	
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	3520C	
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	3520C	
400-177886-9	MW2-ROX-101019	Total/NA	Water	3520C	
MB 400-462088/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462088/20-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462088/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462088/21-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462088/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 463023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-3	MW6A-ROX-101019	Total/NA	Water	8270D LL	462088
400-177886-4	MW6B-ROX-101019	Total/NA	Water	8270D LL	462088
400-177886-5	MW6D-ROX-101019	Total/NA	Water	8270D LL	462088
400-177886-6	MW6C-ROX-101019	Total/NA	Water	8270D LL	462088
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	8270D LL	462088
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	8270D LL	462088
400-177886-9	MW2-ROX-101019	Total/NA	Water	8270D LL	462088
MB 400-462088/1-A	Method Blank	Total/NA	Water	8270D LL	462088
LCS 400-462088/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462088
LCSD 400-462088/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462088

Analysis Batch: 463747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-3	MW6A-ROX-101019	Total/NA	Water	8270D	462088
400-177886-4	MW6B-ROX-101019	Total/NA	Water	8270D	462088
400-177886-5	MW6D-ROX-101019	Total/NA	Water	8270D	462088
400-177886-6	MW6C-ROX-101019	Total/NA	Water	8270D	462088
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	8270D	462088
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	8270D	462088
400-177886-9	MW2-ROX-101019	Total/NA	Water	8270D	462088
MB 400-462088/1-A	Method Blank	Total/NA	Water	8270D	462088

GC/MS Semi VOA (Continued)

Analysis Batch: 463747 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-462088/2-A	Lab Control Sample	Total/NA	Water	8270D	462088
LCSD 400-462088/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462088

Analysis Batch: 464197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-3	MW6A-ROX-101019	Total/NA	Water	8270D	462088
400-177886-4	MW6B-ROX-101019	Total/NA	Water	8270D	462088
400-177886-5	MW6D-ROX-101019	Total/NA	Water	8270D	462088
400-177886-6	MW6C-ROX-101019	Total/NA	Water	8270D	462088
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	8270D	462088
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	8270D	462088
400-177886-9	MW2-ROX-101019	Total/NA	Water	8270D	462088
MB 400-462088/1-A	Method Blank	Total/NA	Water	8270D	462088
LCS 400-462088/20-A	Lab Control Sample	Total/NA	Water	8270D	462088
LCSD 400-462088/21-A	Lab Control Sample Dup	Total/NA	Water	8270D	462088

GC Semi VOA

Prep Batch: 462775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-1	TB-ROX-101019-8011	Total/NA	Water	8011	
400-177886-3	MW6A-ROX-101019	Total/NA	Water	8011	
400-177886-4	MW6B-ROX-101019	Total/NA	Water	8011	
400-177886-5	MW6D-ROX-101019	Total/NA	Water	8011	
400-177886-6	MW6C-ROX-101019	Total/NA	Water	8011	
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	8011	
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	8011	
400-177886-9	MW2-ROX-101019	Total/NA	Water	8011	
MB 400-462775/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462775/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462775/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 462889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177886-1	TB-ROX-101019-8011	Total/NA	Water	8011	462775
400-177886-3	MW6A-ROX-101019	Total/NA	Water	8011	462775
400-177886-4	MW6B-ROX-101019	Total/NA	Water	8011	462775
400-177886-5	MW6D-ROX-101019	Total/NA	Water	8011	462775
400-177886-6	MW6C-ROX-101019	Total/NA	Water	8011	462775
400-177886-7	MW6C-ROX-101019-DUP	Total/NA	Water	8011	462775
400-177886-8	MW2-ROX-101019-EB	Total/NA	Water	8011	462775
400-177886-9	MW2-ROX-101019	Total/NA	Water	8011	462775
MB 400-462775/1-A	Method Blank	Total/NA	Water	8011	462775
LCS 400-462775/2-A	Lab Control Sample	Total/NA	Water	8011	462775
LCSD 400-462775/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462775

QC Sample Results

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

Job ID: 400-177886-1

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

Lab Sample ID: MB 400-462753/4
Matrix: Water
Analysis Batch: 462753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/23/19 08:47	1
Acrolein	ND		20	10	ug/L			10/23/19 08:47	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:47	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:47	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:47	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:47	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:47	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:47	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:47	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:47	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:47	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:47	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:47	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:47	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:47	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:47	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:47	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:47	1

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

Lab Sample ID: MB 400-462753/4
Matrix: Water
Analysis Batch: 462753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:47	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 08:47	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:47	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:47	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:47	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:47	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/23/19 08:47*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 08:47*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/23/19 08:47*	*1*

Lab Sample ID: LCS 400-462753/1002
Matrix: Water
Analysis Batch: 462753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	221		ug/L		110	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	489		ug/L		98	64 - 142
Benzene	50.0	44.8		ug/L		90	70 - 130
Bromobenzene	50.0	45.7		ug/L		91	70 - 132
Bromochloromethane	50.0	46.1		ug/L		92	70 - 130
Bromodichloromethane	50.0	40.3		ug/L		81	67 - 133
Bromoform	50.0	44.2		ug/L		88	57 - 140
Bromomethane	50.0	39.0		ug/L		78	10 - 160
2-Butanone (MEK)	200	243		ug/L		122	61 - 145
Carbon disulfide	50.0	42.3		ug/L		85	61 - 137
Carbon tetrachloride	50.0	34.6		ug/L		69	61 - 137
Chlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dibromochloromethane	50.0	41.9		ug/L		84	67 - 135
Chloroethane	50.0	48.2		ug/L		96	55 - 141

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

Lab Sample ID: LCS 400-462753/1002
Matrix: Water
Analysis Batch: 462753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	49.0		ug/L		98	10 - 160
Chloroform	50.0	41.2		ug/L		82	69 - 130
1-Chlorohexane	50.0	41.3		ug/L		83	69 - 130
Chloromethane	50.0	48.7		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	42.8		ug/L		86	68 - 130
cis-1,3-Dichloropropene	50.0	41.6		ug/L		83	69 - 132
1,2-Dichlorobenzene	50.0	44.7		ug/L		89	67 - 130
1,3-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dichlorodifluoromethane	50.0	32.7		ug/L		65	41 - 146
1,1-Dichloroethane	50.0	42.7		ug/L		85	70 - 130
1,2-Dichloroethane	50.0	38.5		ug/L		77	69 - 130
1,1-Dichloroethene	50.0	42.4		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	44.2		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	44.0		ug/L		88	70 - 130
2,2-Dichloropropane	50.0	36.4		ug/L		73	52 - 135
1,1-Dichloropropene	50.0	41.8		ug/L		84	70 - 130
Ethylbenzene	50.0	44.0		ug/L		88	70 - 130
Ethyl methacrylate	50.0	44.4		ug/L		89	68 - 130
Hexachlorobutadiene	50.0	45.7		ug/L		91	53 - 140
2-Hexanone	200	209		ug/L		104	65 - 137
Isopropylbenzene	50.0	44.5		ug/L		89	70 - 130
Methylene bromide	50.0	42.8		ug/L		86	70 - 130
Methylene Chloride	50.0	46.2		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	195		ug/L		98	69 - 138
Methyl tert-butyl ether	50.0	43.3		ug/L		87	66 - 130
m-Xylene & p-Xylene	50.0	43.8		ug/L		88	70 - 130
Naphthalene	50.0	44.3		ug/L		89	47 - 149
n-Butylbenzene	50.0	42.5		ug/L		85	67 - 130
N-Propylbenzene	50.0	43.1		ug/L		86	70 - 130
o-Chlorotoluene	50.0	41.5		ug/L		83	70 - 130
o-Xylene	50.0	43.9		ug/L		88	70 - 130
p-Chlorotoluene	50.0	41.6		ug/L		83	70 - 130
p-Isopropyltoluene	50.0	43.2		ug/L		86	65 - 130
sec-Butylbenzene	50.0	43.0		ug/L		86	66 - 130
Styrene	50.0	45.6		ug/L		91	70 - 130
tert-Butylbenzene	50.0	40.1		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	40.9		ug/L		82	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.9		ug/L		92	70 - 131
Tetrachloroethene	50.0	43.8		ug/L		88	65 - 130
Toluene	50.0	43.9		ug/L		88	70 - 130
trans-1,2-Dichloroethene	50.0	44.8		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	38.9		ug/L		78	63 - 130
1,2,3-Trichlorobenzene	50.0	45.8		ug/L		92	60 - 138
1,2,4-Trichlorobenzene	50.0	46.4		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	37.1		ug/L		74	68 - 130
1,1,2-Trichloroethane	50.0	45.5		ug/L		91	70 - 130
Trichloroethene	50.0	45.2		ug/L		90	70 - 130
Trichlorofluoromethane	50.0	49.3		ug/L		99	65 - 138

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

Lab Sample ID: LCS 400-462753/1002
Matrix: Water
Analysis Batch: 462753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	45.1		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	41.4		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	50.0	42.2		ug/L		84	69 - 130
Vinyl acetate	100	112		ug/L		112	26 - 160
Vinyl chloride	50.0	48.1		ug/L		96	59 - 136
Xylenes, Total	100	87.7		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*94*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: MB 400-462088/1-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/17/19 23:47	10/30/19 14:43	1
Benzoic acid	ND		30	7.3	ug/L		10/17/19 23:47	10/30/19 14:43	1
Benzyl alcohol	ND		10	2.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		10/17/19 23:47	10/30/19 14:43	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		10/17/19 23:47	10/30/19 14:43	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		10/17/19 23:47	10/30/19 14:43	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		10/17/19 23:47	10/30/19 14:43	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		10/17/19 23:47	10/30/19 14:43	1
4-Chloroaniline	ND		10	3.4	ug/L		10/17/19 23:47	10/30/19 14:43	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/17/19 23:47	10/30/19 14:43	1
2-Chloronaphthalene	ND		10	0.14	ug/L		10/17/19 23:47	10/30/19 14:43	1
2-Chlorophenol	ND		10	2.2	ug/L		10/17/19 23:47	10/30/19 14:43	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
Dibenzofuran	ND		10	0.17	ug/L		10/17/19 23:47	10/30/19 14:43	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
Diethyl phthalate	ND		10	0.24	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/17/19 23:47	10/30/19 14:43	1
Dimethyl phthalate	ND		10	0.17	ug/L		10/17/19 23:47	10/30/19 14:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/17/19 23:47	10/30/19 14:43	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/17/19 23:47	10/30/19 14:43	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		10/17/19 23:47	10/30/19 14:43	1
1,4-Dioxane	ND		10	1.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/17/19 23:47	10/30/19 14:43	1

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

Lab Sample ID: MB 400-462088/1-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		10	0.17	ug/L		10/17/19 23:47	10/30/19 14:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/17/19 23:47	10/30/19 14:43	1
Hexachloroethane	ND		10	4.2	ug/L		10/17/19 23:47	10/30/19 14:43	1
Indene	ND		10	1.0	ug/L		10/17/19 23:47	10/30/19 14:43	1
Isophorone	ND		10	0.14	ug/L		10/17/19 23:47	10/30/19 14:43	1
2-Methylphenol	ND		10	1.8	ug/L		10/17/19 23:47	10/30/19 14:43	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		10/17/19 23:47	10/30/19 14:43	1
2-Nitroaniline	ND		10	2.2	ug/L		10/17/19 23:47	10/30/19 14:43	1
3-Nitroaniline	ND		10	1.8	ug/L		10/17/19 23:47	10/30/19 14:43	1
4-Nitroaniline	ND		10	1.5	ug/L		10/17/19 23:47	10/30/19 14:43	1
Nitrobenzene	ND		10	0.13	ug/L		10/17/19 23:47	10/30/19 14:43	1
2-Nitrophenol	ND		10	5.2	ug/L		10/17/19 23:47	10/30/19 14:43	1
4-Nitrophenol	ND		10	2.1	ug/L		10/17/19 23:47	10/30/19 14:43	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/17/19 23:47	10/30/19 14:43	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/17/19 23:47	10/30/19 14:43	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		10/17/19 23:47	10/30/19 14:43	1
Pentachlorophenol	ND		20	1.4	ug/L		10/17/19 23:47	10/30/19 14:43	1
Phenol	ND		10	2.6	ug/L		10/17/19 23:47	10/30/19 14:43	1
Pyridine	ND		10	3.2	ug/L		10/17/19 23:47	10/30/19 14:43	1
Quinoline	ND		10	4.5	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/17/19 23:47	10/30/19 14:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/17/19 23:47	10/30/19 14:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*66*		*17 - 127*	*10/17/19 23:47*	*10/30/19 14:43*	*1*
Terphenyl-d14	*84*		*44 - 149*	*10/17/19 23:47*	*10/30/19 14:43*	*1*
2,4,6-Tribromophenol	*57*		*26 - 150*	*10/17/19 23:47*	*10/30/19 14:43*	*1*
2-Fluorobiphenyl	*72*		*46 - 124*	*10/17/19 23:47*	*10/30/19 14:43*	*1*
2-Fluorophenol	*57*		*13 - 113*	*10/17/19 23:47*	*10/30/19 14:43*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*10/17/19 23:47*	*10/30/19 14:43*	*1*

Lab Sample ID: MB 400-462088/1-A
Matrix: Water
Analysis Batch: 464197

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND		10	1.7	ug/L		10/17/19 23:47	11/01/19 16:33	1

Lab Sample ID: LCS 400-462088/20-A
Matrix: Water
Analysis Batch: 464197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	1.79	J *	ug/L		1	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*48*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*

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

Lab Sample ID: LCS 400-462088/20-A
Matrix: Water
Analysis Batch: 464197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462088

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	68		26 - 150
2-Fluorobiphenyl	56		46 - 124
2-Fluorophenol	39		13 - 113
Nitrobenzene-d5	50		36 - 126

Lab Sample ID: LCS 400-462088/2-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	49.7		ug/L		41	21 - 120
Benzoic acid	466	275		ug/L		59	10 - 144
Benzyl alcohol	120	67.5		ug/L		56	28 - 120
Bis(2-chloroethoxy)methane	120	86.5		ug/L		72	47 - 120
Bis(2-chloroethyl)ether	120	138		ug/L		115	44 - 120
bis (2-chloroisopropyl) ether	120	98.9		ug/L		82	33 - 121
Bis(2-ethylhexyl) phthalate	120	89.5		ug/L		75	52 - 147
4-Bromophenyl phenyl ether	120	75.2		ug/L		63	54 - 122
Butyl benzyl phthalate	120	90.7		ug/L		76	54 - 133
4-Chloroaniline	120	64.6		ug/L		54	26 - 120
4-Chloro-3-methylphenol	120	93.1		ug/L		78	48 - 131
2-Chloronaphthalene	120	79.7		ug/L		66	52 - 121
2-Chlorophenol	120	85.0		ug/L		71	40 - 120
4-Chlorophenyl phenyl ether	120	76.6		ug/L		64	56 - 125
Dibenz[a,h]acridine	120	57.0		ug/L		48	31 - 150
Dibenzofuran	120	83.0		ug/L		69	56 - 122
3,3'-Dichlorobenzidine	160	130		ug/L		81	36 - 132
2,4-Dichlorophenol	120	87.8		ug/L		73	49 - 120
Diethyl phthalate	120	105		ug/L		87	50 - 137
2,4-Dimethylphenol	120	93.5		ug/L		78	48 - 120
Dimethyl phthalate	120	93.3		ug/L		78	57 - 124
Di-n-butyl phthalate	120	90.4		ug/L		75	58 - 126
4,6-Dinitro-ortho-cresol	240	191		ug/L		80	23 - 148
2,4-Dinitrophenol	240	183		ug/L		76	10 - 150
2,4-Dinitrotoluene	120	98.6		ug/L		82	54 - 142
2,6-Dinitrotoluene	120	92.1		ug/L		77	55 - 130
Di-n-octyl phthalate	120	92.1		ug/L		77	57 - 138
1,4-Dioxane	120	68.5		ug/L		57	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	86.9		ug/L		72	45 - 124
Hexachlorobenzene	120	78.1		ug/L		65	52 - 129
Hexachlorocyclopentadiene	120	6.21	J *	ug/L		5	10 - 134
Hexachloroethane	120	60.6		ug/L		50	41 - 120
Indene	120	91.6		ug/L		76	49 - 120
Isophorone	120	88.4		ug/L		74	48 - 120
2-Methylphenol	120	112		ug/L		93	46 - 124
3 & 4 Methylphenol	120	90.6		ug/L		75	45 - 120
2-Nitroaniline	120	96.2		ug/L		80	51 - 145
3-Nitroaniline	120	90.7		ug/L		76	37 - 127

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

Lab Sample ID: LCS 400-462088/2-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	120	97.7		ug/L		81	36 - 137
Nitrobenzene	120	86.6		ug/L		72	45 - 120
2-Nitrophenol	120	93.4		ug/L		78	40 - 124
4-Nitrophenol	240	166		ug/L		69	23 - 146
N-Nitrosodimethylamine	120	106		ug/L		88	29 - 137
N-Nitrosodi-n-propylamine	120	102		ug/L		85	45 - 120
N-Nitrosodiphenylamine	119	86.6		ug/L		73	54 - 120
Pentachlorophenol	240	137		ug/L		57	31 - 130
Phenol	120	95.8		ug/L		80	40 - 120
Pyridine	240	158		ug/L		66	16 - 120
Quinoline	120	82.1		ug/L		68	49 - 130
2,4,5-Trichlorophenol	120	90.7		ug/L		76	51 - 136
2,4,6-Trichlorophenol	120	87.4		ug/L		73	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*79*		*44 - 149*
2,4,6-Tribromophenol	*74*		*26 - 150*
2-Fluorobiphenyl	*72*		*46 - 124*
2-Fluorophenol	*51*		*13 - 113*
Nitrobenzene-d5	*71*		*36 - 126*

Lab Sample ID: LCSD 400-462088/21-A
Matrix: Water
Analysis Batch: 464197

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	2.12	J *	ug/L		2	10 - 120	17	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Phenol-d5	*50*		*17 - 127*
Terphenyl-d14	*84*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*
2-Fluorobiphenyl	*58*		*46 - 124*
2-Fluorophenol	*41*		*13 - 113*
Nitrobenzene-d5	*51*		*36 - 126*

Lab Sample ID: LCSD 400-462088/3-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	45.0		ug/L		37	21 - 120	10	30
Benzoic acid	466	299		ug/L		64	10 - 144	8	30
Benzyl alcohol	120	58.1		ug/L		48	28 - 120	15	30
Bis(2-chloroethoxy)methane	120	81.4		ug/L		68	47 - 120	6	30
Bis(2-chloroethyl)ether	120	124		ug/L		103	44 - 120	11	30
bis (2-chloroisopropyl) ether	120	91.9		ug/L		77	33 - 121	7	30

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

Lab Sample ID: LCSD 400-462088/3-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	120	104		ug/L		87	52 - 147	15	30
4-Bromophenyl phenyl ether	120	84.7		ug/L		71	54 - 122	12	30
Butyl benzyl phthalate	120	102		ug/L		85	54 - 133	12	30
4-Chloroaniline	120	65.7		ug/L		55	26 - 120	2	30
4-Chloro-3-methylphenol	120	86.2		ug/L		72	48 - 131	8	30
2-Chloronaphthalene	120	87.1		ug/L		73	52 - 121	9	30
2-Chlorophenol	120	86.7		ug/L		72	40 - 120	2	30
4-Chlorophenyl phenyl ether	120	85.9		ug/L		72	56 - 125	11	30
Dibenz[a,h]acridine	120	85.0	*	ug/L		71	31 - 150	39	30
Dibenzofuran	120	89.7		ug/L		75	56 - 122	8	30
3,3'-Dichlorobenzidine	160	131		ug/L		82	36 - 132	0	30
2,4-Dichlorophenol	120	84.5		ug/L		70	49 - 120	4	30
Diethyl phthalate	120	103		ug/L		86	50 - 137	1	30
2,4-Dimethylphenol	120	88.8		ug/L		74	48 - 120	5	30
Dimethyl phthalate	120	91.2		ug/L		76	57 - 124	2	30
Di-n-butyl phthalate	120	102		ug/L		85	58 - 126	12	30
4,6-Dinitro-ortho-cresol	240	179		ug/L		75	23 - 148	7	30
2,4-Dinitrophenol	240	172		ug/L		72	10 - 150	6	30
2,4-Dinitrotoluene	120	97.0		ug/L		81	54 - 142	2	30
2,6-Dinitrotoluene	120	91.3		ug/L		76	55 - 130	1	30
Di-n-octyl phthalate	120	105		ug/L		87	57 - 138	13	30
1,4-Dioxane	120	66.4		ug/L		55	31 - 120	3	30
1,2-Diphenylhydrazine (as Azobenzene)	120	92.6		ug/L		77	45 - 124	6	30
Hexachlorobenzene	120	87.6		ug/L		73	52 - 129	11	30
Hexachlorocyclopentadiene	120	13.1	J *	ug/L		11	10 - 134	71	30
Hexachloroethane	120	66.5		ug/L		55	41 - 120	9	30
Indene	120	90.6		ug/L		75	49 - 120	1	30
Isophorone	120	84.0		ug/L		70	48 - 120	5	30
2-Methylphenol	120	113		ug/L		94	46 - 124	1	30
3 & 4 Methylphenol	120	90.2		ug/L		75	45 - 120	0	30
2-Nitroaniline	120	94.0		ug/L		78	51 - 145	2	30
3-Nitroaniline	120	91.8		ug/L		76	37 - 127	1	30
4-Nitroaniline	120	94.6		ug/L		79	36 - 137	3	30
Nitrobenzene	120	82.3		ug/L		69	45 - 120	5	30
2-Nitrophenol	120	88.4		ug/L		74	40 - 124	5	30
4-Nitrophenol	240	154		ug/L		64	23 - 146	8	30
N-Nitrosodimethylamine	120	103		ug/L		86	29 - 137	3	30
N-Nitrosodi-n-propylamine	120	97.7		ug/L		81	45 - 120	4	30
N-Nitrosodiphenylamine	119	87.9		ug/L		74	54 - 120	1	30
Pentachlorophenol	240	135		ug/L		56	31 - 130	1	30
Phenol	120	92.9		ug/L		77	40 - 120	3	30
Pyridine	240	157		ug/L		65	16 - 120	1	30
Quinoline	120	78.2		ug/L		65	49 - 130	5	30
2,4,5-Trichlorophenol	120	89.4		ug/L		74	51 - 136	1	30
2,4,6-Trichlorophenol	120	86.3		ug/L		72	50 - 127	1	30

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

Lab Sample ID: LCSD 400-462088/3-A
Matrix: Water
Analysis Batch: 463747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462088

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Phenol-d5	63		17 - 127
Terphenyl-d14	79		44 - 149
2,4,6-Tribromophenol	70		26 - 150
2-Fluorobiphenyl	71		46 - 124
2-Fluorophenol	58		13 - 113
Nitrobenzene-d5	71		36 - 126

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

Lab Sample ID: MB 400-462088/1-A
Matrix: Water
Analysis Batch: 463023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		10/17/19 23:47	10/24/19 17:11	1
Acenaphthylene	ND		0.20	0.045	ug/L		10/17/19 23:47	10/24/19 17:11	1
Anthracene	ND		0.20	0.032	ug/L		10/17/19 23:47	10/24/19 17:11	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		10/17/19 23:47	10/24/19 17:11	1
Benzo[a]pyrene	0.199	J	0.20	0.042	ug/L		10/17/19 23:47	10/24/19 17:11	1
Benzo[b]fluoranthene	0.172	J	0.20	0.034	ug/L		10/17/19 23:47	10/24/19 17:11	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		10/17/19 23:47	10/24/19 17:11	1
Benzo[k]fluoranthene	0.124	J	0.20	0.10	ug/L		10/17/19 23:47	10/24/19 17:11	1
Chrysene	ND		0.20	0.074	ug/L		10/17/19 23:47	10/24/19 17:11	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		10/17/19 23:47	10/24/19 17:11	1
Fluoranthene	ND		0.20	0.068	ug/L		10/17/19 23:47	10/24/19 17:11	1
Fluorene	ND		0.20	0.11	ug/L		10/17/19 23:47	10/24/19 17:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		10/17/19 23:47	10/24/19 17:11	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		10/17/19 23:47	10/24/19 17:11	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		10/17/19 23:47	10/24/19 17:11	1
Phenanthrene	ND		0.20	0.036	ug/L		10/17/19 23:47	10/24/19 17:11	1
Pyrene	ND		0.20	0.040	ug/L		10/17/19 23:47	10/24/19 17:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	117		33 - 138	10/17/19 23:47	10/24/19 17:11	1
2-Fluorobiphenyl	88		15 - 122	10/17/19 23:47	10/24/19 17:11	1
Nitrobenzene-d5	90		19 - 130	10/17/19 23:47	10/24/19 17:11	1

Lab Sample ID: LCS 400-462088/2-A
Matrix: Water
Analysis Batch: 463023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	99.8		ug/L		83	41 - 120
Acenaphthylene	120	96.5		ug/L		80	44 - 120
Anthracene	120	86.4		ug/L		72	49 - 120
Benzo[a]anthracene	120	90.0		ug/L		75	61 - 135
Benzo[a]pyrene	120	80.9		ug/L		67	52 - 120
Benzo[b]fluoranthene	120	75.6		ug/L		63	53 - 134

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

Lab Sample ID: LCS 400-462088/2-A
Matrix: Water
Analysis Batch: 463023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	120	88.7		ug/L		74	47 - 133
Benzo[k]fluoranthene	120	84.2		ug/L		70	57 - 134
Chrysene	120	88.2		ug/L		73	55 - 122
Dibenz(a,h)anthracene	120	104		ug/L		87	48 - 146
Fluoranthene	120	96.1		ug/L		80	54 - 128
Fluorene	120	108		ug/L		90	45 - 125
Indeno[1,2,3-cd]pyrene	120	94.6		ug/L		79	43 - 142
1-Methylnaphthalene	120	80.6		ug/L		67	41 - 120
2-Methylnaphthalene	120	80.7		ug/L		67	32 - 124
Phenanthrene	120	88.2		ug/L		74	48 - 120
Pyrene	120	89.5		ug/L		75	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*96*		*33 - 138*
2-Fluorobiphenyl	*95*		*15 - 122*
Nitrobenzene-d5	*80*		*19 - 130*

Lab Sample ID: LCSD 400-462088/3-A
Matrix: Water
Analysis Batch: 463023

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	93.5		ug/L		78	41 - 120	7	56
Acenaphthylene	120	91.3		ug/L		76	44 - 120	6	56
Anthracene	120	89.3		ug/L		74	49 - 120	3	51
Benzo[a]anthracene	120	91.6		ug/L		76	61 - 135	2	49
Benzo[a]pyrene	120	82.1		ug/L		68	52 - 120	2	50
Benzo[b]fluoranthene	120	81.5		ug/L		68	53 - 134	8	54
Benzo[g,h,i]perylene	120	81.6		ug/L		68	47 - 133	8	50
Benzo[k]fluoranthene	120	90.8		ug/L		76	57 - 134	8	52
Chrysene	120	92.4		ug/L		77	55 - 122	5	50
Dibenz(a,h)anthracene	120	96.5		ug/L		80	48 - 146	7	50
Fluoranthene	120	94.7		ug/L		79	54 - 128	1	52
Fluorene	120	110		ug/L		91	45 - 125	2	56
Indeno[1,2,3-cd]pyrene	120	84.7		ug/L		71	43 - 142	11	51
1-Methylnaphthalene	120	78.2		ug/L		65	41 - 120	3	55
2-Methylnaphthalene	120	77.4		ug/L		64	32 - 124	4	57
Phenanthrene	120	88.9		ug/L		74	48 - 120	1	56
Pyrene	120	96.2		ug/L		80	48 - 132	7	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*93*		*33 - 138*
2-Fluorobiphenyl	*86*		*15 - 122*
Nitrobenzene-d5	*81*		*19 - 130*

QC Sample Results

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

Job ID: 400-177886-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462775/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462775

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		10/23/19 08:52	10/23/19 20:41	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/23/19 08:52	10/23/19 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*		*51 - 149*	*10/23/19 08:52*	*10/23/19 20:41*	*1*

Lab Sample ID: LCS 400-462775/2-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.102		ug/L		102	60 - 140
1,2-Dibromoethane	0.100	0.109		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*148*		*51 - 149*

Lab Sample ID: LCSD 400-462775/3-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462775

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.106		ug/L		106	60 - 140	4	30
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/10/19
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 - 1.03.004 / 60592794 - 1.03.0044
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 Office ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): B. Howell B. Burleson
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS)
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ 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 LEDO 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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL
	TB-ROX-101019-8011	10/10/19	0000	Water	X					2			2	
	TB-ROX-101019-8260	"	0000	"	X					2	2			
	MW6A-ROX-101019		0905		X			X		6	2	1	2	1
	MW6B-ROX-101019		0945		X			X		6	2	1	2	1
	MW6D-ROX-101019		1025		X			X		6	2	1	2	1
	MW6C-ROX-101019		1100		X			X		6	2	1	2	1
	MW6C-ROX-101019-DUP		1100		X			X		6	2	1	2	1
	MW2-ROX-101019-EB		1235		X			X		6	2	1	2	1
	MW7-ROX-101019	▽	1315	▽	X			X		6	2	1	2	1

400-177886 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	1194 6302 0178 / 1194 6302 0215 / 1194 6302 0189	10/10/19	1600
	Fedex: 1194 6307 0204 / 1194 6302 0190		
		10/11/19	848

custody seal #'s: 1106256, 1106257, 1106258, 1106259, 1106260, 1106261, 1106262, 1106263, 1106264, 1106265

0.0°C, 4.8°C, 0.5°C, 2.3°C, 0.2°C

IR8

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11/4/2019

Version 14Dec15

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177886-1

Login Number: 177886
List Number: 1
Creator: Gore, Beija K

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	1106256,1106257,1106248,1106259,1106260,1106261,1106262,1106263,1106264,1106265
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0 °C, 4.8 °C, 0.5 °C, 2.3 °C, 0.2 °C, IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-177886-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-177927-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/26/2019

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

Sample Identification	Sample Identification
TB-ROX-101119-8011	TB-ROX-101119-8260
MW14-ROX-101119	P66-ROX-101119
MW1-ROX-101119-EB	MW1-ROX-101119

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, although not indicated in the laboratory case narrative, 1-methylnaphthalene was detected in equipment blank MW1-ROX-101119-EB. The laboratory case narrative indicated the LCSD recovery for benzenethiol, and the LCS/LCSD RPDs for benzenethiol and hexachlorocyclopentadiene were outside evaluation criteria. Several SVOC and/or PAH surrogate recoveries were outside criteria in several investigative and QC samples. Several VOC and SVOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW14-ROX-101119. The internal standard area recovery for perylene-d_{12} was outside criteria in the SVOC LCS. The continuing calibration verifications for benzyl alcohol and hexachlorocyclopentadiene 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
MW1-ROX-101119-EB	PAHs	1-Methylnaphthalene	0.030 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 400-462249/4-A/5-A	SVOCs	Benzenethiol	33/**0.6**	**192**	10-120/30
LCS/LCSD 400-462249/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	15/22	**38**	10-129/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-101119	SVOCs	Benzenethiol	**UJ**
P66-ROX-101119	SVOCs	Benzenethiol	**UJ**
MW1-ROX-101119	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P66-ROX-101119	PAHs	Terphenyl-d_{14}	**13**	33-138
P66-ROX-101119	PAHs	2-Fluorobiphenyl	**14**	15-122
P66-ROX-101119	PAHs	Nitrobenzene-d_5	**15**	19-130
MW1-ROX-101119-EB	PAHs	Terphenyl-d_{14}	**179**	33-138
MW1-ROX-101119-EB	PAHs	2-Fluorobiphenyl	**124**	15-122
MW1-ROX-101119-EB	PAHs	Nitrobenzene-d_5	**144**	19-130
MW1-ROX-101119	SVOCs	2-Fluorophenol	**7**	10-120
MW1-ROX-101119	SVOCs	Phenol-d_5	**8**	10-120
MW1-ROX-101119	SVOCs	2,4,6-Tribromophenol	**12**	15-135
MB 400-462249/1-A	SVOCs	2-Fluorophenol	**0**	10-120
MB 400-462249/1-A	SVOCs	Phenol-d_5	**1**	10-120
MB 400-462249/1-A	SVOCs	2,4,6-Tribromophenol	**0**	15-135

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-462249/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

Analytical data that required qualification based on surrogate data are included in the table below. Method blanks and equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
P66-ROX-101119	PAHs	Acenaphthene	**J**
P66-ROX-101119	PAHs	Fluoranthene	**J**
P66-ROX-101119	PAHs	Fluorene	**J**
P66-ROX-101119	PAHs	Phenanthrene	**J**
P66-ROX-101119	PAHs	1-Methylnaphthalene	**J**
P66-ROX-101119	PAHs	2-Methylnaphthalene	**J**
P66-ROX-101119	PAHs	All non-detects	**UJ**
MW1-ROX-101119	SVOCs	Benzoic acid	**UJ**
MW1-ROX-101119	SVOCs	Benzyl alcohol	**UJ**
MW1-ROX-101119	SVOCs	4-Chloro-3-methylphenol	**UJ**
MW1-ROX-101119	SVOCs	2-Chlorophenol	**UJ**
MW1-ROX-101119	SVOCs	2,4-Dichlorophenol	**UJ**
MW1-ROX-101119	SVOCs	2,4-Dimethylphenol	**UJ**
MW1-ROX-101119	SVOCs	2,4-Dinitrophenol	**UJ**
MW1-ROX-101119	SVOCs	2-Methylphenol	**UJ**
MW1-ROX-101119	SVOCs	3&4-Methylphenol	**UJ**
MW1-ROX-101119	SVOCs	2-Nitrophenol	**UJ**
MW1-ROX-101119	SVOCs	4-Nitrophenol	**UJ**
MW1-ROX-101119	SVOCs	Pentachlorophenol	**UJ**
MW1-ROX-101119	SVOCs	Phenol	**UJ**
MW1-ROX-101119	SVOCs	2,4,5-Trichlorophenol	**UJ**
MW1-ROX-101119	SVOCs	2,4,6-Trichlorophenol	**UJ**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW14-ROX-101119 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
MW14-ROX-101119	VOCs	Acetone	**37/39**	5	43-150/30
MW14-ROX-101119	VOCs	2-Chloroethyl vinyl ether	13/**7**	**62**	10-150/50
MW14-ROX-101119	VOCs	2-Hexanone	**53/58**	8	65-140/30
MW14-ROX-101119	SVOCs	Aniline	**0/0**	**NC**	10-143/63
MW14-ROX-101119	SVOCs	Benzyl alcohol	10/39	**119**	10-154/37

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW14-ROX-101119	SVOCs	4-Chloroaniline	18/66	**114**	10-152/94
MW14-ROX-101119	SVOCs	Quinoline	32/88	**93**	10-180/40

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.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-101119	VOCs	Acetone	**UJ**
MW14-ROX-101119	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW14-ROX-101119	VOCs	2-Hexanone	**UJ**
MW14-ROX-101119	SVOCs	Aniline	**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
LCS 400-462249/4-A	SVOCs	Perylene-d_{12}	**113624**	280944-1123774

Laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for benzyl alcohol and hexachlorocyclopentadiene were below acceptance criteria and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-101119	SVOCs	Benzyl alcohol	**UJ**
MW14-ROX-101119	SVOCs	Hexachlorocyclopentadiene	**UJ**

Sample ID	Parameter	Analyte	Qualification
P66-ROX-101119	SVOCs	Benzyl alcohol	**UJ**
P66-ROX-101119	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW1-ROX-101119	SVOCs	Hexachlorocyclopentadiene	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-177927-1
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:
10/31/2019 4:56:14 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
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LINKS

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Reviewed 11/26/19 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: 400-177927-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-177927-1

Comments
No additional comments.

Receipt
The samples were received on 10/12/2019 8:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.9° C, 4.2° C and 4.4° C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-462753 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-462753 was outside control limits. Sample matrix interference is suspected.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101119-8260 (400-177927-2), MW14-ROX-101119 (400-177927-3), P66-ROX-101119 (400-177927-4), MW1-ROX-101119-EB (400-177927-5) and MW1-ROX-101119 (400-177927-6). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D 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 400-462249/1-A). These results have been reported and qualified.

Method 8270D LL: Surrogate recovery for the following sample was outside the upper control limit: MW1-ROX-101119-EB (400-177927-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-462762 recovered above the upper control limit for Pyrene and 2-Methylnaphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: Surrogate recovery for the following sample was outside control limits: P66-ROX-101119 (400-177927-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463349 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Benzyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462249 and analytical batch 400-463349 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462249 and analytical batch 400-463349 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462249 and analytical batch 400-463349 recovered outside control limits for the following analytes:

Job ID: 400-177927-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Hexachlorocyclopentadiene.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-462249 and analytical batch 400-463349 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-462249 and analytical batch 400-463349 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270D: The probable swing of the pH has caused the MW1-ROX-101119 (400-177927-6) and (MB 400-462249/1-A) to fail the acid surrogates.

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

GC Semi VOA

Method 8011: The following samples were re-prepared outside of preparation holding time due to client specific MS/MSD not spiked: MW14-ROX-101119 (400-177927-3[MS]) and MW14-ROX-101119 (400-177927-3[MSD]). Spike compounds were inadvertently omitted during the original extraction process for the matrix spike/matrix spike duplicate (MS/MSD). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results..

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: 400-177927-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177927-1	TB-ROX-101119-8011	Water	10/11/19 00:00	10/12/19 08:21	
400-177927-2	TB-ROX-101119-8260	Water	10/11/19 00:00	10/12/19 08:21	
400-177927-3	MW14-ROX-101119	Water	10/11/19 10:05	10/12/19 08:21	
400-177927-4	P66-ROX-101119	Water	10/11/19 11:15	10/12/19 08:21	
400-177927-5	MW1-ROX-101119-EB	Water	10/11/19 12:40	10/12/19 08:21	
400-177927-6	MW1-ROX-101119	Water	10/11/19 13:15	10/12/19 08:21	

Detection Summary

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

Job ID: 400-177927-1

Client Sample ID: TB-ROX-101119-8011

Lab Sample ID: 400-177927-1

No Detections.

Client Sample ID: TB-ROX-101119-8260

Lab Sample ID: 400-177927-2

No Detections.

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	5.6	J	9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: P66-ROX-101119

Lab Sample ID: 400-177927-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.64	J	1.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	0.69	J	1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	48		1.0	0.53	ug/L	1		8260B	Total/NA
Naphthalene	87		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	3.0		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	70		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	0.78	J	5.0	0.60	ug/L	1		8260B	Total/NA
sec-Butylbenzene	6.1		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	4.1		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.50	J	1.0	0.41	ug/L	1		8260B	Total/NA
Acenaphthene	0.26		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.020	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.18	J	0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.038	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	10		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	7.6		0.19	0.019	ug/L	1		8270D LL	Total/NA
4-Chloroaniline	17		9.6	3.3	ug/L	1		8270D	Total/NA
Dibenzofuran	1.2	J	9.6	0.50	ug/L	1		8270D	Total/NA

Client Sample ID: MW1-ROX-101119-EB

Lab Sample ID: 400-177927-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.030	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW1-ROX-101119

Lab Sample ID: 400-177927-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 400-177927-1

Client Sample ID: TB-ROX-101119-8011
Date Collected: 10/11/19 00:00
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/24/19 11:09	10/25/19 03:46	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 11:09	10/25/19 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*	*p*	*51 - 149*	*10/24/19 11:09*	*10/25/19 03:46*	*1*

Client Sample ID: TB-ROX-101119-8260

Lab Sample ID: 400-177927-2

Date Collected: 10/11/19 00:00
Date Received: 10/12/19 08:21

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			10/23/19 12:52	1
Acrolein	ND		20	10	ug/L			10/23/19 12:52	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 12:52	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 12:52	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 12:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 12:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 12:52	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 12:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 12:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 12:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 12:52	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 12:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 12:52	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 12:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 12:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 12:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 12:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 12:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 12:52	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 12:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 12:52	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 12:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 12:52	1
1,4-Dioxane	ND		400	100	ug/L			10/23/19 12:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 12:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 12:52	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 12:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 12:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 12:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 12:52	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 12:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 12:52	1

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

Job ID: 400-177927-1

Client Sample ID: TB-ROX-101119-8260
Date Collected: 10/11/19 00:00
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 12:52	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 12:52	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 12:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 12:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 12:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 12:52	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 12:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 12:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 12:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 12:52	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 12:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 12:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 12:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 12:52	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 12:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 12:52	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*10/23/19 12:52*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 12:52*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 12:52*	*1*

Client Sample Results

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

Job ID: 400-177927-1

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3

Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/23/19 10:23	1
Acrolein	ND		20	10	ug/L			10/23/19 10:23	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 10:23	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 10:23	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 10:23	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 10:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 10:23	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 10:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 10:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 10:23	1
2-Chloroethyl vinyl ether	ND	F2 F1 UJ	5.0	2.0	ug/L			10/23/19 10:23	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 10:23	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 10:23	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 10:23	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 10:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 10:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 10:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 10:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 10:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 10:23	1
2-Hexanone	ND	F1 UJ	25	3.1	ug/L			10/23/19 10:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 10:23	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 10:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 10:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 10:23	1
1,4-Dioxane	ND		400	100	ug/L			10/23/19 10:23	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 10:23	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 10:23	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 10:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 10:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 10:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 10:23	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 10:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 10:23	1

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3

Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 10:23	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 10:23	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 10:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 10:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 10:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 10:23	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 10:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 10:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 10:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 10:23	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 10:23	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 10:23	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 10:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 10:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 10:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 10:23	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 10:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 10:23	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*10/23/19 10:23*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*10/23/19 10:23*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 10:23*	*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		10/18/19 23:17	10/23/19 22:14	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1
Anthracene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Chrysene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Fluoranthene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1
Fluorene	ND		0.19	0.020	ug/L		10/18/19 23:17	10/23/19 22:14	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/23/19 22:14	1
Phenanthrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1
Pyrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*118*		*33 - 138*	*10/18/19 23:17*	*10/23/19 22:14*	*1*

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3

Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	103		15 - 122	10/18/19 23:17	10/23/19 22:14	1
Nitrobenzene-d5	103		19 - 130	10/18/19 23:17	10/23/19 22:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F1 UJ	9.6	3.6	ug/L		10/18/19 23:17	10/27/19 14:58	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/18/19 23:17	10/27/19 14:58	1
Benzoic acid	ND		29	7.0	ug/L		10/18/19 23:17	10/27/19 14:58	1
Benzyl alcohol	ND	F2 UJ	9.6	1.9	ug/L		10/18/19 23:17	10/27/19 14:58	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/18/19 23:17	10/27/19 14:58	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/18/19 23:17	10/27/19 14:58	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		10/18/19 23:17	10/27/19 14:58	1
Bis(2-ethylhexyl) phthalate	5.6	J	9.6	4.8	ug/L		10/18/19 23:17	10/27/19 14:58	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/18/19 23:17	10/27/19 14:58	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/18/19 23:17	10/27/19 14:58	1
4-Chloroaniline	ND	F2	9.6	3.3	ug/L		10/18/19 23:17	10/27/19 14:58	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/18/19 23:17	10/27/19 14:58	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/18/19 23:17	10/27/19 14:58	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/18/19 23:17	10/27/19 14:58	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/18/19 23:17	10/27/19 14:58	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/18/19 23:17	10/27/19 14:58	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/18/19 23:17	10/27/19 14:58	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/18/19 23:17	10/27/19 14:58	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		10/18/19 23:17	10/27/19 14:58	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/18/19 23:17	10/27/19 14:58	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/18/19 23:17	10/27/19 14:58	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/18/19 23:17	10/27/19 14:58	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/18/19 23:17	10/27/19 14:58	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/18/19 23:17	10/27/19 14:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/18/19 23:17	10/27/19 14:58	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/18/19 23:17	10/27/19 14:58	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/18/19 23:17	10/27/19 14:58	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/18/19 23:17	10/27/19 14:58	1
Indene	ND		9.6	0.96	ug/L		10/18/19 23:17	10/27/19 14:58	1
Isophorone	ND		9.6	0.55	ug/L		10/18/19 23:17	10/27/19 14:58	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/18/19 23:17	10/27/19 14:58	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/18/19 23:17	10/27/19 14:58	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/18/19 23:17	10/27/19 14:58	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/18/19 23:17	10/27/19 14:58	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/18/19 23:17	10/27/19 14:58	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/18/19 23:17	10/27/19 14:58	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/18/19 23:17	10/27/19 14:58	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/18/19 23:17	10/27/19 14:58	1

Client Sample ID: MW14-ROX-101119
Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		10/18/19 23:17	10/27/19 14:58	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/18/19 23:17	10/27/19 14:58	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/18/19 23:17	10/27/19 14:58	1
Pentachlorophenol	ND		19	1.7	ug/L		10/18/19 23:17	10/27/19 14:58	1
Phenol	ND		9.6	2.5	ug/L		10/18/19 23:17	10/27/19 14:58	1
Pyridine	ND		9.6	3.1	ug/L		10/18/19 23:17	10/27/19 14:58	1
Quinoline	ND	F2	9.6	5.7	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/18/19 23:17	10/27/19 14:58	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		10/18/19 23:17	10/27/19 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*10/18/19 23:17*	*10/27/19 14:58*	*1*
2-Fluorophenol	*31*		*10 - 120*	*10/18/19 23:17*	*10/27/19 14:58*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*10/18/19 23:17*	*10/27/19 14:58*	*1*
Phenol-d5	*43*		*10 - 120*	*10/18/19 23:17*	*10/27/19 14:58*	*1*
Terphenyl-d14	*79*		*53 - 125*	*10/18/19 23:17*	*10/27/19 14:58*	*1*
2,4,6-Tribromophenol	*53*		*15 - 135*	*10/18/19 23:17*	*10/27/19 14:58*	*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		10/24/19 11:09	10/25/19 04:10	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/24/19 11:09	10/25/19 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*		*51 - 149*	*10/24/19 11:09*	*10/25/19 04:10*	*1*

Client Sample ID: P66-ROX-101119

Lab Sample ID: 400-177927-4

Date Collected: 10/11/19 11:15
Date Received: 10/12/19 08:21

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			10/23/19 16:18	1
Acrolein	ND		20	10	ug/L			10/23/19 16:18	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 16:18	1
Benzene	0.64	J	1.0	0.38	ug/L			10/23/19 16:18	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 16:18	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 16:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 16:18	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 16:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 16:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 16:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 16:18	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 16:18	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 16:18	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 16:18	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 16:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 16:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 16:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 16:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Ethylbenzene	0.69	J	1.0	0.50	ug/L			10/23/19 16:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 16:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 16:18	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 16:18	1
Isopropylbenzene	48		1.0	0.53	ug/L			10/23/19 16:18	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 16:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 16:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 16:18	1
1,4-Dioxane	ND		400	100	ug/L			10/23/19 16:18	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 16:18	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 16:18	1
Naphthalene	87		1.0	1.0	ug/L			10/23/19 16:18	1
n-Butylbenzene	3.0		1.0	0.76	ug/L			10/23/19 16:18	1
N-Propylbenzene	70		1.0	0.69	ug/L			10/23/19 16:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 16:18	1
o-Xylene	0.78	J	5.0	0.60	ug/L			10/23/19 16:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 16:18	1

Client Sample ID: P66-ROX-101119

Date Collected: 10/11/19 11:15
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 16:18	1
sec-Butylbenzene	6.1		1.0	0.70	ug/L			10/23/19 16:18	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 16:18	1
tert-Butylbenzene	4.1		1.0	0.63	ug/L			10/23/19 16:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 16:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 16:18	1
Toluene	0.50	J	1.0	0.41	ug/L			10/23/19 16:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 16:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 16:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 16:18	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 16:18	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 16:18	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 16:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 16:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 16:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 16:18	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 16:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 16:18	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/23/19 16:18*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*10/23/19 16:18*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/23/19 16:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.26	J	0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
Anthracene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Chrysene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Fluoranthene	0.020	J	0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
Fluorene	0.18	J	0.19	0.020	ug/L		10/18/19 23:17	10/30/19 06:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/18/19 23:17	10/30/19 06:22	1
Phenanthrene	0.038	J	0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
Pyrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
1-Methylnaphthalene	10		0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1
2-Methylnaphthalene	7.6		0.19	0.019	ug/L		10/18/19 23:17	10/30/19 06:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*13*	*X*	*33 - 138*	*10/18/19 23:17*	*10/30/19 06:22*	*1*

Client Sample ID: P66-ROX-101119
Date Collected: 10/11/19 11:15
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	14	X	15 - 122	10/18/19 23:17	10/30/19 06:22	1
Nitrobenzene-d5	15	X	19 - 130	10/18/19 23:17	10/30/19 06:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		10/18/19 23:17	10/27/19 16:13	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/18/19 23:17	10/27/19 16:13	1
Benzoic acid	ND		29	7.0	ug/L		10/18/19 23:17	10/27/19 16:13	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/18/19 23:17	10/27/19 16:13	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/18/19 23:17	10/27/19 16:13	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/18/19 23:17	10/27/19 16:13	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		10/18/19 23:17	10/27/19 16:13	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		10/18/19 23:17	10/27/19 16:13	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/18/19 23:17	10/27/19 16:13	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/18/19 23:17	10/27/19 16:13	1
4-Chloroaniline	17		9.6	3.3	ug/L		10/18/19 23:17	10/27/19 16:13	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/18/19 23:17	10/27/19 16:13	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/18/19 23:17	10/27/19 16:13	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/18/19 23:17	10/27/19 16:13	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/18/19 23:17	10/27/19 16:13	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/18/19 23:17	10/27/19 16:13	1
Dibenzofuran	1.2	J	9.6	0.50	ug/L		10/18/19 23:17	10/27/19 16:13	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/18/19 23:17	10/27/19 16:13	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		10/18/19 23:17	10/27/19 16:13	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		10/18/19 23:17	10/27/19 16:13	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/18/19 23:17	10/27/19 16:13	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/18/19 23:17	10/27/19 16:13	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/18/19 23:17	10/27/19 16:13	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/18/19 23:17	10/27/19 16:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/18/19 23:17	10/27/19 16:13	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/18/19 23:17	10/27/19 16:13	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/18/19 23:17	10/27/19 16:13	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/18/19 23:17	10/27/19 16:13	1
Indene	ND		9.6	0.96	ug/L		10/18/19 23:17	10/27/19 16:13	1
Isophorone	ND		9.6	0.55	ug/L		10/18/19 23:17	10/27/19 16:13	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/18/19 23:17	10/27/19 16:13	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/18/19 23:17	10/27/19 16:13	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/18/19 23:17	10/27/19 16:13	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/18/19 23:17	10/27/19 16:13	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/18/19 23:17	10/27/19 16:13	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/18/19 23:17	10/27/19 16:13	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/18/19 23:17	10/27/19 16:13	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/18/19 23:17	10/27/19 16:13	1

Client Sample ID: P66-ROX-101119

Date Collected: 10/11/19 11:15
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		10/18/19 23:17	10/27/19 16:13	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/18/19 23:17	10/27/19 16:13	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/18/19 23:17	10/27/19 16:13	1
Pentachlorophenol	ND		19	1.7	ug/L		10/18/19 23:17	10/27/19 16:13	1
Phenol	ND		9.6	2.5	ug/L		10/18/19 23:17	10/27/19 16:13	1
Pyridine	ND		9.6	3.1	ug/L		10/18/19 23:17	10/27/19 16:13	1
Quinoline	ND		9.6	5.8	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/18/19 23:17	10/27/19 16:13	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/18/19 23:17	10/27/19 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*34 - 120*	*10/18/19 23:17*	*10/27/19 16:13*	*1*
2-Fluorophenol	*53*		*10 - 120*	*10/18/19 23:17*	*10/27/19 16:13*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*10/18/19 23:17*	*10/27/19 16:13*	*1*
Phenol-d5	*71*		*10 - 120*	*10/18/19 23:17*	*10/27/19 16:13*	*1*
Terphenyl-d14	*87*		*53 - 125*	*10/18/19 23:17*	*10/27/19 16:13*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*10/18/19 23:17*	*10/27/19 16:13*	*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	0.0052	ug/L		10/24/19 11:09	10/25/19 05:20	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/24/19 11:09	10/25/19 05:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*		*51 - 149*	*10/24/19 11:09*	*10/25/19 05:20*	*1*

Client Sample Results

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

Job ID: 400-177927-1

Client Sample ID: MW1-ROX-101119-EB

Lab Sample ID: 400-177927-5

Date Collected: 10/11/19 12:40
Date Received: 10/12/19 08:21

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			10/23/19 09:59	1
Acrolein	ND		20	10	ug/L			10/23/19 09:59	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 09:59	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 09:59	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 09:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 09:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 09:59	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 09:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 09:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 09:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 09:59	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 09:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 09:59	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 09:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 09:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 09:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 09:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 09:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 09:59	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 09:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 09:59	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 09:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 09:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 09:59	1
1,4-Dioxane	ND		400	100	ug/L			10/23/19 09:59	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 09:59	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 09:59	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 09:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 09:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 09:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 09:59	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 09:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 09:59	1

Client Sample ID: MW1-ROX-101119-EB

Lab Sample ID: 400-177927-5

Date Collected: 10/11/19 12:40
Date Received: 10/12/19 08:21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 09:59	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 09:59	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 09:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 09:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 09:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 09:59	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 09:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 09:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 09:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 09:59	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 09:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 09:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 09:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 09:59	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 09:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 09:59	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 09:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/23/19 09:59*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 09:59*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/23/19 09:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
Anthracene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Chrysene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Fluoranthene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
Fluorene	ND		0.19	0.020	ug/L		10/18/19 23:17	10/23/19 23:17	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:17	1
Phenanthrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
Pyrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
1-Methylnaphthalene	0.030	J	0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*179*	*X*	*33 - 138*	*10/18/19 23:17*	*10/23/19 23:17*	*1*

Client Sample ID: MW1-ROX-101119-EB
Date Collected: 10/11/19 12:40
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	124	X	15 - 122	10/18/19 23:17	10/23/19 23:17	1
Nitrobenzene-d5	144	X	19 - 130	10/18/19 23:17	10/23/19 23:17	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		10/18/19 23:17	10/27/19 17:03	1
Benzenethiol	ND	*	9.7	1.6	ug/L		10/18/19 23:17	10/27/19 17:03	1
Benzoic acid	ND		29	7.0	ug/L		10/18/19 23:17	10/27/19 17:03	1
Benzyl alcohol	ND		9.7	1.9	ug/L		10/18/19 23:17	10/27/19 17:03	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		10/18/19 23:17	10/27/19 17:03	1
Bis(2-chloroethyl)ether	ND		9.7	0.71	ug/L		10/18/19 23:17	10/27/19 17:03	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		10/18/19 23:17	10/27/19 17:03	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		10/18/19 23:17	10/27/19 17:03	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		10/18/19 23:17	10/27/19 17:03	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		10/18/19 23:17	10/27/19 17:03	1
4-Chloroaniline	ND		9.7	3.3	ug/L		10/18/19 23:17	10/27/19 17:03	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		10/18/19 23:17	10/27/19 17:03	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		10/18/19 23:17	10/27/19 17:03	1
2-Chlorophenol	ND		9.7	2.1	ug/L		10/18/19 23:17	10/27/19 17:03	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		10/18/19 23:17	10/27/19 17:03	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		10/18/19 23:17	10/27/19 17:03	1
Dibenzofuran	ND		9.7	0.50	ug/L		10/18/19 23:17	10/27/19 17:03	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		10/18/19 23:17	10/27/19 17:03	1
Diethyl phthalate	ND		9.7	0.68	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		10/18/19 23:17	10/27/19 17:03	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		10/18/19 23:17	10/27/19 17:03	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		10/18/19 23:17	10/27/19 17:03	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		10/18/19 23:17	10/27/19 17:03	1
Di-n-octyl phthalate	ND		9.7	0.42	ug/L		10/18/19 23:17	10/27/19 17:03	1
1,4-Dioxane	ND		9.7	0.97	ug/L		10/18/19 23:17	10/27/19 17:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		10/18/19 23:17	10/27/19 17:03	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		10/18/19 23:17	10/27/19 17:03	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/18/19 23:17	10/27/19 17:03	1
Hexachloroethane	ND		9.7	4.1	ug/L		10/18/19 23:17	10/27/19 17:03	1
Indene	ND		9.7	0.97	ug/L		10/18/19 23:17	10/27/19 17:03	1
Isophorone	ND		9.7	0.55	ug/L		10/18/19 23:17	10/27/19 17:03	1
2-Methylphenol	ND		9.7	1.7	ug/L		10/18/19 23:17	10/27/19 17:03	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		10/18/19 23:17	10/27/19 17:03	1
2-Nitroaniline	ND		9.7	2.1	ug/L		10/18/19 23:17	10/27/19 17:03	1
3-Nitroaniline	ND		9.7	1.7	ug/L		10/18/19 23:17	10/27/19 17:03	1
4-Nitroaniline	ND		9.7	2.4	ug/L		10/18/19 23:17	10/27/19 17:03	1
Nitrobenzene	ND		9.7	0.53	ug/L		10/18/19 23:17	10/27/19 17:03	1
2-Nitrophenol	ND		9.7	0.63	ug/L		10/18/19 23:17	10/27/19 17:03	1
4-Nitrophenol	ND		9.7	2.0	ug/L		10/18/19 23:17	10/27/19 17:03	1

Client Sample ID: MW1-ROX-101119-EB

Lab Sample ID: 400-177927-5

Date Collected: 10/11/19 12:40
Date Received: 10/12/19 08:21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		10/18/19 23:17	10/27/19 17:03	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		10/18/19 23:17	10/27/19 17:03	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		10/18/19 23:17	10/27/19 17:03	1
Pentachlorophenol	ND		19	1.7	ug/L		10/18/19 23:17	10/27/19 17:03	1
Phenol	ND		9.7	2.5	ug/L		10/18/19 23:17	10/27/19 17:03	1
Pyridine	ND		9.7	3.1	ug/L		10/18/19 23:17	10/27/19 17:03	1
Quinoline	ND		9.7	5.8	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		10/18/19 23:17	10/27/19 17:03	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/18/19 23:17	10/27/19 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*34 - 120*	*10/18/19 23:17*	*10/27/19 17:03*	*1*
2-Fluorophenol	*47*		*10 - 120*	*10/18/19 23:17*	*10/27/19 17:03*	*1*
Nitrobenzene-d5	*77*		*27 - 120*	*10/18/19 23:17*	*10/27/19 17:03*	*1*
Phenol-d5	*65*		*10 - 120*	*10/18/19 23:17*	*10/27/19 17:03*	*1*
Terphenyl-d14	*96*		*53 - 125*	*10/18/19 23:17*	*10/27/19 17:03*	*1*
2,4,6-Tribromophenol	*79*		*15 - 135*	*10/18/19 23:17*	*10/27/19 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		0.029	0.0054	ug/L		10/24/19 11:09	10/25/19 05:44	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 11:09	10/25/19 05:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*	*p*	*51 - 149*	*10/24/19 11:09*	*10/25/19 05:44*	*1*

Client Sample Results

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

Job ID: 400-177927-1

Client Sample ID: MW1-ROX-101119
Date Collected: 10/11/19 13:15
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-6
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			10/23/19 13:18	1
Acrolein	ND		20	10	ug/L			10/23/19 13:18	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 13:18	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 13:18	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 13:18	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 13:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 13:18	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 13:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 13:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 13:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 13:18	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 13:18	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 13:18	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 13:18	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 13:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 13:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 13:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 13:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 13:18	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 13:18	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 13:18	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 13:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 13:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 13:18	1
1,4-Dioxane	ND		400	100	ug/L			10/23/19 13:18	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 13:18	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 13:18	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 13:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 13:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 13:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 13:18	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 13:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 13:18	1

Client Sample ID: MW1-ROX-101119

Lab Sample ID: 400-177927-6

Date Collected: 10/11/19 13:15
Date Received: 10/12/19 08:21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 13:18	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 13:18	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 13:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 13:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 13:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 13:18	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 13:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 13:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 13:18	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:18	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 13:18	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 13:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 13:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 13:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 13:18	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 13:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 13:18	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*10/23/19 13:18*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*10/23/19 13:18*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 13:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
Anthracene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Benzo[g,h,i]perylene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Chrysene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Dibenz(a,h)anthracene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Fluoranthene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
Fluorene	ND		0.19	0.020	ug/L		10/18/19 23:17	10/23/19 23:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.039	ug/L		10/18/19 23:17	10/23/19 23:33	1
Phenanthrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
Pyrene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/18/19 23:17	10/23/19 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*113*		*33 - 138*	*10/18/19 23:17*	*10/23/19 23:33*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	104		15 - 122	10/18/19 23:17	10/23/19 23:33	1
Nitrobenzene-d5	109		19 - 130	10/18/19 23:17	10/23/19 23:33	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		10/18/19 23:17	10/27/19 17:28	1
Benzenethiol	ND	* UJ	9.7	1.7	ug/L		10/18/19 23:17	10/27/19 17:28	1
Benzoic acid	ND	UJ	29	7.1	ug/L		10/18/19 23:17	10/27/19 17:28	1
Benzyl alcohol	ND	UJ	9.7	1.9	ug/L		10/18/19 23:17	10/27/19 17:28	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		10/18/19 23:17	10/27/19 17:28	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		10/18/19 23:17	10/27/19 17:28	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		10/18/19 23:17	10/27/19 17:28	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		10/18/19 23:17	10/27/19 17:28	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		10/18/19 23:17	10/27/19 17:28	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		10/18/19 23:17	10/27/19 17:28	1
4-Chloroaniline	ND		9.7	3.3	ug/L		10/18/19 23:17	10/27/19 17:28	1
4-Chloro-3-methylphenol	ND	UJ	9.7	3.7	ug/L		10/18/19 23:17	10/27/19 17:28	1
2-Chloronaphthalene	ND		9.7	0.51	ug/L		10/18/19 23:17	10/27/19 17:28	1
2-Chlorophenol	ND	UJ	9.7	2.1	ug/L		10/18/19 23:17	10/27/19 17:28	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		10/18/19 23:17	10/27/19 17:28	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		10/18/19 23:17	10/27/19 17:28	1
Dibenzofuran	ND		9.7	0.51	ug/L		10/18/19 23:17	10/27/19 17:28	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,4-Dichlorophenol	ND	UJ	9.7	2.9	ug/L		10/18/19 23:17	10/27/19 17:28	1
Diethyl phthalate	ND		9.7	0.68	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,4-Dimethylphenol	ND	UJ	9.7	3.4	ug/L		10/18/19 23:17	10/27/19 17:28	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		10/18/19 23:17	10/27/19 17:28	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		10/18/19 23:17	10/27/19 17:28	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,4-Dinitrophenol	ND	UJ	29	3.3	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		10/18/19 23:17	10/27/19 17:28	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		10/18/19 23:17	10/27/19 17:28	1
1,4-Dioxane	ND		9.7	0.97	ug/L		10/18/19 23:17	10/27/19 17:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		10/18/19 23:17	10/27/19 17:28	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		10/18/19 23:17	10/27/19 17:28	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/18/19 23:17	10/27/19 17:28	1
Hexachloroethane	ND		9.7	4.1	ug/L		10/18/19 23:17	10/27/19 17:28	1
Indene	ND		9.7	0.97	ug/L		10/18/19 23:17	10/27/19 17:28	1
Isophorone	ND		9.7	0.55	ug/L		10/18/19 23:17	10/27/19 17:28	1
2-Methylphenol	ND	UJ	9.7	1.8	ug/L		10/18/19 23:17	10/27/19 17:28	1
3 & 4 Methylphenol	ND	UJ	19	1.0	ug/L		10/18/19 23:17	10/27/19 17:28	1
2-Nitroaniline	ND		9.7	2.1	ug/L		10/18/19 23:17	10/27/19 17:28	1
3-Nitroaniline	ND		9.7	1.8	ug/L		10/18/19 23:17	10/27/19 17:28	1
4-Nitroaniline	ND		9.7	2.4	ug/L		10/18/19 23:17	10/27/19 17:28	1
Nitrobenzene	ND		9.7	0.54	ug/L		10/18/19 23:17	10/27/19 17:28	1
2-Nitrophenol	ND	UJ	9.7	0.63	ug/L		10/18/19 23:17	10/27/19 17:28	1
4-Nitrophenol	ND	UJ	9.7	2.0	ug/L		10/18/19 23:17	10/27/19 17:28	1

Client Sample ID: MW1-ROX-101119

Date Collected: 10/11/19 13:15
Date Received: 10/12/19 08:21

Lab Sample ID: 400-177927-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		10/18/19 23:17	10/27/19 17:28	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		10/18/19 23:17	10/27/19 17:28	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		10/18/19 23:17	10/27/19 17:28	1
Pentachlorophenol	ND	UJ	19	1.8	ug/L		10/18/19 23:17	10/27/19 17:28	1
Phenol	ND	UJ	9.7	2.5	ug/L		10/18/19 23:17	10/27/19 17:28	1
Pyridine	ND		9.7	3.1	ug/L		10/18/19 23:17	10/27/19 17:28	1
Quinoline	ND		9.7	5.8	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,4,5-Trichlorophenol	ND	UJ	9.7	3.6	ug/L		10/18/19 23:17	10/27/19 17:28	1
2,4,6-Trichlorophenol	ND	UJ	9.7	3.4	ug/L		10/18/19 23:17	10/27/19 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*10/18/19 23:17*	*10/27/19 17:28*	*1*
2-Fluorophenol	*7*	*X*	*10 - 120*	*10/18/19 23:17*	*10/27/19 17:28*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*10/18/19 23:17*	*10/27/19 17:28*	*1*
Phenol-d5	*8*	*X*	*10 - 120*	*10/18/19 23:17*	*10/27/19 17:28*	*1*
Terphenyl-d14	*72*		*53 - 125*	*10/18/19 23:17*	*10/27/19 17:28*	*1*
2,4,6-Tribromophenol	*12*	*X*	*15 - 135*	*10/18/19 23:17*	*10/27/19 17:28*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/24/19 11:09	10/25/19 06:07	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		10/24/19 11:09	10/25/19 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*	*p*	*51 - 149*	*10/24/19 11:09*	*10/25/19 06:07*	*1*

Definitions/Glossary

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

Job ID: 400-177927-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
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
H	Sample was prepped or analyzed beyond the specified holding time
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

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

Surrogate Summary

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

Job ID: 400-177927-1

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)
400-177927-2	TB-ROX-101119-8260	91	94	96
400-177927-3	MW14-ROX-101119	92	95	96
400-177927-3 MS	MW14-ROX-101119	94	94	95
400-177927-3 MSD	MW14-ROX-101119	94	93	97
400-177927-4	P66-ROX-101119	94	96	95
400-177927-5	MW1-ROX-101119-EB	93	94	95
400-177927-6	MW1-ROX-101119	94	95	96
LCS 400-462753/1002	Lab Control Sample	94	94	96
MB 400-462753/4	Method Blank	93	94	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-177927-3	MW14-ROX-101119	75	31	68	43	79	53
400-177927-3 MS	MW14-ROX-101119	81	50	79	64	91	79
400-177927-3 MSD	MW14-ROX-101119	93	68	85	82	105	97
400-177927-4	P66-ROX-101119	75	53	73	71	87	92
400-177927-5	MW1-ROX-101119-EB	85	47	77	65	96	79
400-177927-6	MW1-ROX-101119	74	7 X	64	8 X	72	12 X
LCS 400-462249/2-A	Lab Control Sample	75	46	72	60	83	74
LCS 400-462249/4-A	Lab Control Sample	109	64	71	13	108	104
LCSD 400-462249/3-A	Lab Control Sample Dup	83	56	81	70	89	80
LCSD 400-462249/5-A	Lab Control Sample Dup	70	34	64	49	77	54
MB 400-462249/1-A	Method Blank	74	0 X	61	1 X	79	0 X

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)
400-177927-3	MW14-ROX-101119	118	103	103
400-177927-3 MS	MW14-ROX-101119	66	72	65
400-177927-3 MSD	MW14-ROX-101119	76	84	76
400-177927-4	P66-ROX-101119	13 X	14 X	15 X

Surrogate Summary

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

Job ID: 400-177927-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-177927-5	MW1-ROX-101119-EB	179 X	124 X	144 X
400-177927-6	MW1-ROX-101119	113	104	109
LCS 400-462249/2-A	Lab Control Sample	91	71	65
LCSD 400-462249/3-A	Lab Control Sample Dup	96	81	61
MB 400-462249/1-A	Method Blank	140 X	97	93

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)
400-177927-1	TB-ROX-101119-8011	67 p
400-177927-3	MW14-ROX-101119	67
400-177927-3 MS	MW14-ROX-101119	99
400-177927-3 MSD	MW14-ROX-101119	99
400-177927-4	P66-ROX-101119	65
400-177927-5	MW1-ROX-101119-EB	84 p
400-177927-6	MW1-ROX-101119	74 p
LCS 400-462993/2-A	Lab Control Sample	80
LCS 400-463424/2-A	Lab Control Sample	74
LCSD 400-462993/3-A	Lab Control Sample Dup	82
MB 400-462993/1-A	Method Blank	74
MB 400-463424/1-A	Method Blank	75

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-177927-1

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: 400-177927-1

Client Sample ID: TB-ROX-101119-8011

Lab Sample ID: 400-177927-1
Matrix: Water

Date Collected: 10/11/19 00:00
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.6 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 03:46	KLR	TAL PEN

Client Sample ID: TB-ROX-101119-8260

Lab Sample ID: 400-177927-2
Matrix: Water

Date Collected: 10/11/19 00:00
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 12:52	PEM	TAL PEN

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3
Matrix: Water

Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 10:23	PEM	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 14:58	VC1	TAL PEN
Total/NA	Prep	3520C			1045.2 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			462762	10/23/19 22:14	PP1	TAL PEN
Total/NA	Prep	8011			36.8 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 04:10	KLR	TAL PEN

Client Sample ID: P66-ROX-101119

Lab Sample ID: 400-177927-4
Matrix: Water

Date Collected: 10/11/19 11:15
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 16:18	PEM	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 16:13	VC1	TAL PEN
Total/NA	Prep	3520C			1043 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			463641	10/30/19 06:22	PP1	TAL PEN
Total/NA	Prep	8011			36.7 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 05:20	KLR	TAL PEN

Client Sample ID: MW1-ROX-101119-EB

Lab Sample ID: 400-177927-5
Matrix: Water

Date Collected: 10/11/19 12:40
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 09:59	PEM	TAL PEN
Total/NA	Prep	3520C			1036.2 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 17:03	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-177927-1

Client Sample ID: MW1-ROX-101119-EB

Lab Sample ID: 400-177927-5
Matrix: Water

Date Collected: 10/11/19 12:40
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1036.2 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			462762	10/23/19 23:17	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 05:44	KLR	TAL PEN

Client Sample ID: MW1-ROX-101119

Lab Sample ID: 400-177927-6
Matrix: Water

Date Collected: 10/11/19 13:15
Date Received: 10/12/19 08:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462753	10/23/19 13:18	PEM	TAL PEN
Total/NA	Prep	3520C			1027.2 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 17:28	VC1	TAL PEN
Total/NA	Prep	3520C			1027.2 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			462762	10/23/19 23:33	PP1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 06:07	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462249/1-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	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 12:54	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		1			462762	10/23/19 21:26	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462753/4
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	462753	10/23/19 08:47	PEM	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462993/1-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	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 02:35	KLR	TAL PEN

Lab Chronicle

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

Job ID: 400-177927-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-463424/1-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	463424	10/28/19 11:15	KLR	TAL PEN
Total/NA	Analysis	8011		1			463461	10/28/19 15:03	KLR	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462249/2-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	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 13:18	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			462762	10/23/19 21:42	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462249/4-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	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 14:08	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462753/1002

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	462753	10/23/19 07:59	PEM	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462993/2-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	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 02:59	KLR	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-463424/2-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	463424	10/28/19 11:15	KLR	TAL PEN
Total/NA	Analysis	8011		1			463461	10/28/19 15:27	KLR	TAL PEN

Lab Chronicle

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

Job ID: 400-177927-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462249/3-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	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 13:43	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			462762	10/23/19 21:58	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462249/5-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	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1			463349	10/27/19 14:33	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462993/3-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	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 03:23	KLR	TAL PEN

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3 MS

Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

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	462753	10/23/19 11:39	PEM	TAL PEN
Total/NA	Prep	3520C			1041.4 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	463349	10/27/19 15:23	VC1	TAL PEN
Total/NA	Prep	3520C			1041.4 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463641	10/30/19 05:48	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	463424	10/28/19 11:15	KLR	TAL PEN
Total/NA	Analysis	8011		1			463461	10/28/19 15:50	KLR	TAL PEN

Client Sample ID: MW14-ROX-101119

Lab Sample ID: 400-177927-3 MSD

Date Collected: 10/11/19 10:05
Date Received: 10/12/19 08:21

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	462753	10/23/19 12:03	PEM	TAL PEN
Total/NA	Prep	3520C			1038 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	463349	10/27/19 15:48	VC1	TAL PEN
Total/NA	Prep	3520C			1038 mL	1 mL	462249	10/18/19 23:17	CGM	TAL PEN
Total/NA	Analysis	8270D LL		5			463641	10/30/19 06:05	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	463424	10/28/19 11:15	KLR	TAL PEN
Total/NA	Analysis	8011		1			463461	10/28/19 16:13	KLR	TAL PEN

Lab Chronicle

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

Job ID: 400-177927-1

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: 400-177927-1

GC/MS VOA

Analysis Batch: 462753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-2	TB-ROX-101119-8260	Total/NA	Water	8260B	
400-177927-3	MW14-ROX-101119	Total/NA	Water	8260B	
400-177927-4	P66-ROX-101119	Total/NA	Water	8260B	
400-177927-5	MW1-ROX-101119-EB	Total/NA	Water	8260B	
400-177927-6	MW1-ROX-101119	Total/NA	Water	8260B	
MB 400-462753/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462753/1002	Lab Control Sample	Total/NA	Water	8260B	
400-177927-3 MS	MW14-ROX-101119	Total/NA	Water	8260B	
400-177927-3 MSD	MW14-ROX-101119	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 462249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-3	MW14-ROX-101119	Total/NA	Water	3520C	
400-177927-4	P66-ROX-101119	Total/NA	Water	3520C	
400-177927-5	MW1-ROX-101119-EB	Total/NA	Water	3520C	
400-177927-6	MW1-ROX-101119	Total/NA	Water	3520C	
MB 400-462249/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462249/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462249/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462249/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462249/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-177927-3 MS	MW14-ROX-101119	Total/NA	Water	3520C	
400-177927-3 MSD	MW14-ROX-101119	Total/NA	Water	3520C	

Analysis Batch: 462762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-3	MW14-ROX-101119	Total/NA	Water	8270D LL	462249
400-177927-5	MW1-ROX-101119-EB	Total/NA	Water	8270D LL	462249
400-177927-6	MW1-ROX-101119	Total/NA	Water	8270D LL	462249
MB 400-462249/1-A	Method Blank	Total/NA	Water	8270D LL	462249
LCS 400-462249/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462249
LCSD 400-462249/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462249

Analysis Batch: 463349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-3	MW14-ROX-101119	Total/NA	Water	8270D	462249
400-177927-4	P66-ROX-101119	Total/NA	Water	8270D	462249
400-177927-5	MW1-ROX-101119-EB	Total/NA	Water	8270D	462249
400-177927-6	MW1-ROX-101119	Total/NA	Water	8270D	462249
MB 400-462249/1-A	Method Blank	Total/NA	Water	8270D	462249
LCS 400-462249/2-A	Lab Control Sample	Total/NA	Water	8270D	462249
LCS 400-462249/4-A	Lab Control Sample	Total/NA	Water	8270D	462249
LCSD 400-462249/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462249
LCSD 400-462249/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	462249
400-177927-3 MS	MW14-ROX-101119	Total/NA	Water	8270D	462249
400-177927-3 MSD	MW14-ROX-101119	Total/NA	Water	8270D	462249

QC Association Summary

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

Job ID: 400-177927-1

GC/MS Semi VOA

Analysis Batch: 463641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-4	P66-ROX-101119	Total/NA	Water	8270D LL	462249
400-177927-3 MS	MW14-ROX-101119	Total/NA	Water	8270D LL	462249
400-177927-3 MSD	MW14-ROX-101119	Total/NA	Water	8270D LL	462249

GC Semi VOA

Prep Batch: 462993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-1	TB-ROX-101119-8011	Total/NA	Water	8011	
400-177927-3	MW14-ROX-101119	Total/NA	Water	8011	
400-177927-4	P66-ROX-101119	Total/NA	Water	8011	
400-177927-5	MW1-ROX-101119-EB	Total/NA	Water	8011	
400-177927-6	MW1-ROX-101119	Total/NA	Water	8011	
MB 400-462993/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462993/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462993/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 463064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177927-1	TB-ROX-101119-8011	Total/NA	Water	8011	462993
400-177927-3	MW14-ROX-101119	Total/NA	Water	8011	462993
400-177927-4	P66-ROX-101119	Total/NA	Water	8011	462993
400-177927-5	MW1-ROX-101119-EB	Total/NA	Water	8011	462993
400-177927-6	MW1-ROX-101119	Total/NA	Water	8011	462993
MB 400-462993/1-A	Method Blank	Total/NA	Water	8011	462993
LCS 400-462993/2-A	Lab Control Sample	Total/NA	Water	8011	462993
LCSD 400-462993/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462993

Prep Batch: 463424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-463424/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-463424/2-A	Lab Control Sample	Total/NA	Water	8011	
400-177927-3 MS	MW14-ROX-101119	Total/NA	Water	8011	
400-177927-3 MSD	MW14-ROX-101119	Total/NA	Water	8011	

Analysis Batch: 463461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-463424/1-A	Method Blank	Total/NA	Water	8011	463424
LCS 400-463424/2-A	Lab Control Sample	Total/NA	Water	8011	463424
400-177927-3 MS	MW14-ROX-101119	Total/NA	Water	8011	463424
400-177927-3 MSD	MW14-ROX-101119	Total/NA	Water	8011	463424

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

Lab Sample ID: MB 400-462753/4
Matrix: Water
Analysis Batch: 462753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/23/19 08:47	1
Acrolein	ND		20	10	ug/L			10/23/19 08:47	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:47	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:47	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:47	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:47	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:47	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:47	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:47	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:47	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:47	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:47	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:47	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:47	1
1,4-Dioxane	ND		400	100	ug/L			10/23/19 08:47	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:47	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:47	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:47	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:47	1

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

Lab Sample ID: MB 400-462753/4
Matrix: Water
Analysis Batch: 462753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:47	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 08:47	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:47	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:47	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:47	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:47	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:47	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:47	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*10/23/19 08:47*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*10/23/19 08:47*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/23/19 08:47*	*1*

Lab Sample ID: LCS 400-462753/1002
Matrix: Water
Analysis Batch: 462753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	221		ug/L		110	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	489		ug/L		98	64 - 142
Benzene	50.0	44.8		ug/L		90	70 - 130
Bromobenzene	50.0	45.7		ug/L		91	70 - 132
Bromochloromethane	50.0	46.1		ug/L		92	70 - 130
Bromodichloromethane	50.0	40.3		ug/L		81	67 - 133
Bromoform	50.0	44.2		ug/L		88	57 - 140
Bromomethane	50.0	39.0		ug/L		78	10 - 160
2-Butanone (MEK)	200	243		ug/L		122	61 - 145
Carbon disulfide	50.0	42.3		ug/L		85	61 - 137
Carbon tetrachloride	50.0	34.6		ug/L		69	61 - 137
Chlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dibromochloromethane	50.0	41.9		ug/L		84	67 - 135

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

Lab Sample ID: LCS 400-462753/1002
Matrix: Water
Analysis Batch: 462753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	48.2		ug/L		96	55 - 141
2-Chloroethyl vinyl ether	50.0	49.0		ug/L		98	10 - 160
Chloroform	50.0	41.2		ug/L		82	69 - 130
1-Chlorohexane	50.0	41.3		ug/L		83	69 - 130
Chloromethane	50.0	48.7		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	42.8		ug/L		86	68 - 130
cis-1,3-Dichloropropene	50.0	41.6		ug/L		83	69 - 132
1,2-Dichlorobenzene	50.0	44.7		ug/L		89	67 - 130
1,3-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 130
Dichlorodifluoromethane	50.0	32.7		ug/L		65	41 - 146
1,1-Dichloroethane	50.0	42.7		ug/L		85	70 - 130
1,2-Dichloroethane	50.0	38.5		ug/L		77	69 - 130
1,1-Dichloroethene	50.0	42.4		ug/L		85	63 - 134
1,2-Dichloropropane	50.0	44.2		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	44.0		ug/L		88	70 - 130
2,2-Dichloropropane	50.0	36.4		ug/L		73	52 - 135
1,1-Dichloropropene	50.0	41.8		ug/L		84	70 - 130
Ethylbenzene	50.0	44.0		ug/L		88	70 - 130
Ethyl methacrylate	50.0	44.4		ug/L		89	68 - 130
Hexachlorobutadiene	50.0	45.7		ug/L		91	53 - 140
2-Hexanone	200	209		ug/L		104	65 - 137
Isopropylbenzene	50.0	44.5		ug/L		89	70 - 130
Methylene bromide	50.0	42.8		ug/L		86	70 - 130
Methylene Chloride	50.0	46.2		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	195		ug/L		98	69 - 138
Methyl tert-butyl ether	50.0	43.3		ug/L		87	66 - 130
m-Xylene & p-Xylene	50.0	43.8		ug/L		88	70 - 130
Naphthalene	50.0	44.3		ug/L		89	47 - 149
n-Butylbenzene	50.0	42.5		ug/L		85	67 - 130
N-Propylbenzene	50.0	43.1		ug/L		86	70 - 130
o-Chlorotoluene	50.0	41.5		ug/L		83	70 - 130
o-Xylene	50.0	43.9		ug/L		88	70 - 130
p-Chlorotoluene	50.0	41.6		ug/L		83	70 - 130
p-Isopropyltoluene	50.0	43.2		ug/L		86	65 - 130
sec-Butylbenzene	50.0	43.0		ug/L		86	66 - 130
Styrene	50.0	45.6		ug/L		91	70 - 130
tert-Butylbenzene	50.0	40.1		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	40.9		ug/L		82	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.9		ug/L		92	70 - 131
Tetrachloroethene	50.0	43.8		ug/L		88	65 - 130
Toluene	50.0	43.9		ug/L		88	70 - 130
trans-1,2-Dichloroethene	50.0	44.8		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	38.9		ug/L		78	63 - 130
1,2,3-Trichlorobenzene	50.0	45.8		ug/L		92	60 - 138
1,2,4-Trichlorobenzene	50.0	46.4		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	37.1		ug/L		74	68 - 130
1,1,2-Trichloroethane	50.0	45.5		ug/L		91	70 - 130
Trichloroethene	50.0	45.2		ug/L		90	70 - 130

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

Lab Sample ID: LCS 400-462753/1002
Matrix: Water
Analysis Batch: 462753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	50.0	49.3		ug/L		99	65 - 138
1,2,3-Trichloropropane	50.0	45.1		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	41.4		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	50.0	42.2		ug/L		84	69 - 130
Vinyl acetate	100	112		ug/L		112	26 - 160
Vinyl chloride	50.0	48.1		ug/L		96	59 - 136
Xylenes, Total	100	87.7		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*94*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 462753

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F1	200	74.8	F1	ug/L		37	43 - 150
Acrolein	ND		500	386		ug/L		77	38 - 150
Acrylonitrile	ND		500	403		ug/L		81	62 - 149
Benzene	ND		50.0	38.3		ug/L		77	56 - 142
Bromobenzene	ND		50.0	38.8		ug/L		78	59 - 136
Bromochloromethane	ND		50.0	39.7		ug/L		79	64 - 140
Bromodichloromethane	ND		50.0	33.6		ug/L		67	59 - 143
Bromoform	ND		50.0	35.5		ug/L		71	50 - 140
Bromomethane	ND		50.0	30.2		ug/L		60	10 - 150
2-Butanone (MEK)	ND		200	114		ug/L		57	55 - 150
Carbon disulfide	ND		50.0	36.4		ug/L		73	48 - 150
Carbon tetrachloride	ND		50.0	29.1		ug/L		58	55 - 145
Chlorobenzene	ND		50.0	38.7		ug/L		77	64 - 130
Dibromochloromethane	ND		50.0	34.9		ug/L		70	56 - 143
Chloroethane	ND		50.0	39.4		ug/L		79	50 - 150
2-Chloroethyl vinyl ether	ND	F2 F1	50.0	6.40		ug/L		13	10 - 150
Chloroform	ND		50.0	35.0		ug/L		70	60 - 141
1-Chlorohexane	ND		50.0	35.6		ug/L		71	56 - 136
Chloromethane	ND		50.0	37.8		ug/L		76	49 - 148
cis-1,2-Dichloroethene	ND		50.0	36.2		ug/L		72	59 - 143
cis-1,3-Dichloropropene	ND		50.0	34.8		ug/L		70	57 - 140
1,2-Dichlorobenzene	ND		50.0	38.4		ug/L		77	52 - 137
1,3-Dichlorobenzene	ND		50.0	38.8		ug/L		78	54 - 135
1,4-Dichlorobenzene	ND		50.0	38.7		ug/L		77	53 - 135
Dichlorodifluoromethane	ND		50.0	23.2		ug/L		46	16 - 150
1,1-Dichloroethane	ND		50.0	36.5		ug/L		73	61 - 144
1,2-Dichloroethane	ND		50.0	32.8		ug/L		66	60 - 141
1,1-Dichloroethene	ND		50.0	37.2		ug/L		74	54 - 147
1,2-Dichloropropane	ND		50.0	37.7		ug/L		75	66 - 137
1,3-Dichloropropane	ND		50.0	38.1		ug/L		76	66 - 133

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

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 462753

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	ND		50.0	31.1		ug/L		62	42 - 144
1,1-Dichloropropene	ND		50.0	36.1		ug/L		72	65 - 136
Ethylbenzene	ND		50.0	38.3		ug/L		77	58 - 131
Ethyl methacrylate	ND		50.0	36.5		ug/L		73	64 - 130
Hexachlorobutadiene	ND		50.0	38.5		ug/L		77	31 - 149
2-Hexanone	ND	F1	200	107	F1	ug/L		53	65 - 140
Isopropylbenzene	ND		50.0	38.6		ug/L		77	56 - 133
Methylene bromide	ND		50.0	36.3		ug/L		73	63 - 138
Methylene Chloride	ND		50.0	39.6		ug/L		79	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	149		ug/L		75	63 - 146
Methyl tert-butyl ether	ND		50.0	36.0		ug/L		72	59 - 137
m-Xylene & p-Xylene	ND		50.0	37.8		ug/L		76	57 - 130
Naphthalene	ND		50.0	36.4		ug/L		73	25 - 150
n-Butylbenzene	ND		50.0	35.9		ug/L		72	41 - 142
N-Propylbenzene	ND		50.0	37.1		ug/L		74	51 - 138
o-Chlorotoluene	ND		50.0	36.8		ug/L		74	53 - 134
o-Xylene	ND		50.0	37.9		ug/L		76	61 - 130
p-Chlorotoluene	ND		50.0	36.2		ug/L		72	54 - 133
p-Isopropyltoluene	ND		50.0	37.0		ug/L		74	48 - 139
sec-Butylbenzene	ND		50.0	37.3		ug/L		75	50 - 138
Styrene	ND		50.0	39.2		ug/L		78	58 - 131
tert-Butylbenzene	ND		50.0	34.8		ug/L		70	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	34.2		ug/L		68	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	39.2		ug/L		78	66 - 135
Tetrachloroethene	ND		50.0	38.4		ug/L		77	52 - 133
Toluene	ND		50.0	37.9		ug/L		76	65 - 130
trans-1,2-Dichloroethene	ND		50.0	38.3		ug/L		77	61 - 143
trans-1,3-Dichloropropene	ND		50.0	32.7		ug/L		65	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	37.6		ug/L		75	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	38.4		ug/L		77	39 - 148
1,1,1-Trichloroethane	ND		50.0	32.0		ug/L		64	57 - 142
1,1,2-Trichloroethane	ND		50.0	38.7		ug/L		77	66 - 131
Trichloroethene	ND		50.0	39.5		ug/L		79	64 - 136
Trichlorofluoromethane	ND		50.0	40.4		ug/L		81	54 - 150
1,2,3-Trichloropropane	ND		50.0	36.8		ug/L		74	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	36.5		ug/L		73	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	36.6		ug/L		73	52 - 135
Vinyl acetate	ND		100	91.9		ug/L		92	26 - 150
Vinyl chloride	ND		50.0	36.8		ug/L		74	46 - 150
Xylenes, Total	ND		100	75.8		ug/L		76	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*94*		*81 - 121*
Toluene-d8 (Surr)	*95*		*80 - 120*

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

Lab Sample ID: 400-177927-3 MSD
Matrix: Water
Analysis Batch: 462753

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F1	200	78.8	F1	ug/L		39	43 - 150	5	30
Acrolein	ND		500	418		ug/L		84	38 - 150	8	31
Acrylonitrile	ND		500	443		ug/L		89	62 - 149	10	30
Benzene	ND		50.0	41.4		ug/L		83	56 - 142	8	30
Bromobenzene	ND		50.0	41.6		ug/L		83	59 - 136	7	30
Bromochloromethane	ND		50.0	42.8		ug/L		86	64 - 140	7	30
Bromodichloromethane	ND		50.0	37.0		ug/L		74	59 - 143	10	30
Bromoform	ND		50.0	39.9		ug/L		80	50 - 140	12	30
Bromomethane	ND		50.0	35.6		ug/L		71	10 - 150	16	50
2-Butanone (MEK)	ND		200	122		ug/L		61	55 - 150	7	30
Carbon disulfide	ND		50.0	40.3		ug/L		81	48 - 150	10	30
Carbon tetrachloride	ND		50.0	32.9		ug/L		66	55 - 145	12	30
Chlorobenzene	ND		50.0	40.8		ug/L		82	64 - 130	5	30
Dibromochloromethane	ND		50.0	38.7		ug/L		77	56 - 143	10	30
Chloroethane	ND		50.0	43.5		ug/L		87	50 - 150	10	30
2-Chloroethyl vinyl ether	ND	F2 F1	50.0	3.38	J F1 F2	ug/L		7	10 - 150	62	50
Chloroform	ND		50.0	38.2		ug/L		76	60 - 141	9	30
1-Chlorohexane	ND		50.0	37.5		ug/L		75	56 - 136	5	30
Chloromethane	ND		50.0	39.8		ug/L		80	49 - 148	5	31
cis-1,2-Dichloroethene	ND		50.0	39.3		ug/L		79	59 - 143	8	30
cis-1,3-Dichloropropene	ND		50.0	38.0		ug/L		76	57 - 140	9	30
1,2-Dichlorobenzene	ND		50.0	40.2		ug/L		80	52 - 137	4	30
1,3-Dichlorobenzene	ND		50.0	40.6		ug/L		81	54 - 135	5	30
1,4-Dichlorobenzene	ND		50.0	39.7		ug/L		79	53 - 135	3	30
Dichlorodifluoromethane	ND		50.0	24.8		ug/L		50	16 - 150	7	31
1,1-Dichloroethane	ND		50.0	39.6		ug/L		79	61 - 144	8	30
1,2-Dichloroethane	ND		50.0	36.4		ug/L		73	60 - 141	11	30
1,1-Dichloroethene	ND		50.0	42.0		ug/L		84	54 - 147	12	30
1,2-Dichloropropane	ND		50.0	41.3		ug/L		83	66 - 137	9	30
1,3-Dichloropropane	ND		50.0	41.4		ug/L		83	66 - 133	8	30
2,2-Dichloropropane	ND		50.0	34.2		ug/L		68	42 - 144	9	31
1,1-Dichloropropene	ND		50.0	39.0		ug/L		78	65 - 136	8	30
Ethylbenzene	ND		50.0	39.9		ug/L		80	58 - 131	4	30
Ethyl methacrylate	ND		50.0	40.8		ug/L		82	64 - 130	11	30
Hexachlorobutadiene	ND		50.0	38.3		ug/L		77	31 - 149	1	36
2-Hexanone	ND	F1	200	116	F1	ug/L		58	65 - 140	8	30
Isopropylbenzene	ND		50.0	40.2		ug/L		80	56 - 133	4	30
Methylene bromide	ND		50.0	40.5		ug/L		81	63 - 138	11	30
Methylene Chloride	ND		50.0	42.7		ug/L		85	60 - 146	7	32
4-Methyl-2-pentanone (MIBK)	ND		200	163		ug/L		81	63 - 146	9	30
Methyl tert-butyl ether	ND		50.0	39.5		ug/L		79	59 - 137	9	30
m-Xylene & p-Xylene	ND		50.0	39.3		ug/L		79	57 - 130	4	30
Naphthalene	ND		50.0	41.5		ug/L		83	25 - 150	13	30
n-Butylbenzene	ND		50.0	36.6		ug/L		73	41 - 142	2	31
N-Propylbenzene	ND		50.0	38.8		ug/L		78	51 - 138	5	30
o-Chlorotoluene	ND		50.0	38.7		ug/L		77	53 - 134	5	30
o-Xylene	ND		50.0	39.9		ug/L		80	61 - 130	5	30
p-Chlorotoluene	ND		50.0	37.5		ug/L		75	54 - 133	4	30

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

Lab Sample ID: 400-177927-3 MSD
Matrix: Water
Analysis Batch: 462753

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	37.8		ug/L		76	48 - 139	2	30
sec-Butylbenzene	ND		50.0	39.0		ug/L		78	50 - 138	4	30
Styrene	ND		50.0	41.1		ug/L		82	58 - 131	5	30
tert-Butylbenzene	ND		50.0	36.7		ug/L		73	54 - 146	5	30
1,1,1,2-Tetrachloroethane	ND		50.0	37.4		ug/L		75	59 - 137	9	30
1,1,2,2-Tetrachloroethane	ND		50.0	43.0		ug/L		86	66 - 135	9	30
Tetrachloroethene	ND		50.0	40.3		ug/L		81	52 - 133	5	30
Toluene	ND		50.0	40.2		ug/L		80	65 - 130	6	30
trans-1,2-Dichloroethene	ND		50.0	41.2		ug/L		82	61 - 143	7	30
trans-1,3-Dichloropropene	ND		50.0	35.7		ug/L		71	53 - 133	9	30
1,2,3-Trichlorobenzene	ND		50.0	40.9		ug/L		82	43 - 145	8	30
1,2,4-Trichlorobenzene	ND		50.0	40.0		ug/L		80	39 - 148	4	30
1,1,1-Trichloroethane	ND		50.0	35.2		ug/L		70	57 - 142	10	30
1,1,2-Trichloroethane	ND		50.0	42.3		ug/L		85	66 - 131	9	30
Trichloroethene	ND		50.0	41.4		ug/L		83	64 - 136	5	30
Trichlorofluoromethane	ND		50.0	42.5		ug/L		85	54 - 150	5	30
1,2,3-Trichloropropane	ND		50.0	41.4		ug/L		83	65 - 133	12	30
1,2,4-Trimethylbenzene	ND		50.0	38.1		ug/L		76	50 - 139	4	30
1,3,5-Trimethylbenzene	ND		50.0	38.5		ug/L		77	52 - 135	5	30
Vinyl acetate	ND		100	101		ug/L		101	26 - 150	10	33
Vinyl chloride	ND		50.0	39.7		ug/L		79	46 - 150	8	30
Xylenes, Total	ND		100	79.2		ug/L		79	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*93*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 400-462249/1-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/18/19 23:17	10/27/19 12:54	1
Benzenethiol	ND		10	1.7	ug/L		10/18/19 23:17	10/27/19 12:54	1
Benzoic acid	ND		30	7.3	ug/L		10/18/19 23:17	10/27/19 12:54	1
Benzyl alcohol	ND		10	2.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/18/19 23:17	10/27/19 12:54	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/18/19 23:17	10/27/19 12:54	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/18/19 23:17	10/27/19 12:54	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/18/19 23:17	10/27/19 12:54	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/18/19 23:17	10/27/19 12:54	1
4-Chloroaniline	ND		10	3.4	ug/L		10/18/19 23:17	10/27/19 12:54	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/18/19 23:17	10/27/19 12:54	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/18/19 23:17	10/27/19 12:54	1
2-Chlorophenol	ND		10	2.2	ug/L		10/18/19 23:17	10/27/19 12:54	1

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

Lab Sample ID: MB 400-462249/1-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
Dibenzofuran	ND		10	0.52	ug/L		10/18/19 23:17	10/27/19 12:54	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
Diethyl phthalate	ND		10	0.70	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/18/19 23:17	10/27/19 12:54	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/18/19 23:17	10/27/19 12:54	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/18/19 23:17	10/27/19 12:54	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/18/19 23:17	10/27/19 12:54	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/18/19 23:17	10/27/19 12:54	1
1,4-Dioxane	ND		10	1.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/18/19 23:17	10/27/19 12:54	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/18/19 23:17	10/27/19 12:54	1
Hexachloroethane	ND		10	4.2	ug/L		10/18/19 23:17	10/27/19 12:54	1
Indene	ND		10	1.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
Isophorone	ND		10	0.57	ug/L		10/18/19 23:17	10/27/19 12:54	1
2-Methylphenol	ND		10	1.8	ug/L		10/18/19 23:17	10/27/19 12:54	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
2-Nitroaniline	ND		10	2.2	ug/L		10/18/19 23:17	10/27/19 12:54	1
3-Nitroaniline	ND		10	1.8	ug/L		10/18/19 23:17	10/27/19 12:54	1
4-Nitroaniline	ND		10	2.5	ug/L		10/18/19 23:17	10/27/19 12:54	1
Nitrobenzene	ND		10	0.55	ug/L		10/18/19 23:17	10/27/19 12:54	1
2-Nitrophenol	ND		10	0.65	ug/L		10/18/19 23:17	10/27/19 12:54	1
4-Nitrophenol	ND		10	2.1	ug/L		10/18/19 23:17	10/27/19 12:54	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/18/19 23:17	10/27/19 12:54	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/18/19 23:17	10/27/19 12:54	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/18/19 23:17	10/27/19 12:54	1
Pentachlorophenol	ND		20	1.8	ug/L		10/18/19 23:17	10/27/19 12:54	1
Phenol	ND		10	2.6	ug/L		10/18/19 23:17	10/27/19 12:54	1
Pyridine	ND		10	3.2	ug/L		10/18/19 23:17	10/27/19 12:54	1
Quinoline	ND		10	6.0	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/18/19 23:17	10/27/19 12:54	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/18/19 23:17	10/27/19 12:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*10/18/19 23:17*	*10/27/19 12:54*	*1*
2-Fluorophenol	*0*	*X*	*10 - 120*	*10/18/19 23:17*	*10/27/19 12:54*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*10/18/19 23:17*	*10/27/19 12:54*	*1*
Phenol-d5	*1*	*X*	*10 - 120*	*10/18/19 23:17*	*10/27/19 12:54*	*1*
Terphenyl-d14	*79*		*53 - 125*	*10/18/19 23:17*	*10/27/19 12:54*	*1*
2,4,6-Tribromophenol	*0*	*X*	*15 - 135*	*10/18/19 23:17*	*10/27/19 12:54*	*1*

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

Lab Sample ID: LCS 400-462249/2-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	21.0		ug/L		70	29 - 120
Benzoic acid	117	82.3		ug/L		71	10 - 150
Benzyl alcohol	30.0	12.1		ug/L		40	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.5		ug/L		72	45 - 120
Bis(2-chloroethyl)ether	30.0	23.4		ug/L		78	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.9		ug/L		70	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.7		ug/L		89	48 - 150
4-Bromophenyl phenyl ether	30.0	21.7		ug/L		72	55 - 122
Butyl benzyl phthalate	30.0	25.3		ug/L		84	46 - 145
4-Chloroaniline	30.0	17.4		ug/L		58	30 - 120
4-Chloro-3-methylphenol	30.0	23.4		ug/L		78	39 - 140
2-Chloronaphthalene	30.0	20.7		ug/L		69	52 - 120
2-Chlorophenol	30.0	20.1		ug/L		67	34 - 120
4-Chlorophenyl phenyl ether	30.0	22.3		ug/L		74	58 - 124
Dibenz[a,h]acridine	30.0	23.8		ug/L		79	46 - 149
Dibenzofuran	30.0	23.4		ug/L		78	58 - 123
3,3'-Dichlorobenzidine	40.0	38.2		ug/L		95	39 - 135
2,4-Dichlorophenol	30.0	22.3		ug/L		74	39 - 128
Diethyl phthalate	30.0	26.8		ug/L		89	44 - 146
2,4-Dimethylphenol	30.0	23.0		ug/L		77	44 - 120
Dimethyl phthalate	30.0	24.2		ug/L		81	50 - 131
Di-n-butyl phthalate	30.0	26.2		ug/L		87	55 - 131
4,6-Dinitro-ortho-cresol	60.0	53.1		ug/L		88	10 - 150
2,4-Dinitrophenol	60.0	56.6		ug/L		94	10 - 150
2,4-Dinitrotoluene	30.0	26.1		ug/L		87	58 - 140
2,6-Dinitrotoluene	30.0	24.3		ug/L		81	57 - 130
Di-n-octyl phthalate	30.0	26.5		ug/L		88	50 - 150
1,4-Dioxane	30.0	15.2		ug/L		51	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.3		ug/L		78	47 - 123
Hexachlorobenzene	30.0	23.3		ug/L		78	52 - 131
Hexachlorocyclopentadiene	30.0	4.60	J	ug/L		15	10 - 129
Hexachloroethane	30.0	16.3		ug/L		54	41 - 120
Indene	30.0	24.2		ug/L		81	47 - 120
Isophorone	30.0	21.4		ug/L		71	49 - 120
2-Methylphenol	30.0	28.0		ug/L		93	39 - 123
3 & 4 Methylphenol	30.0	22.2		ug/L		74	38 - 121
2-Nitroaniline	30.0	23.5		ug/L		78	47 - 150
3-Nitroaniline	30.0	23.1		ug/L		77	34 - 132
4-Nitroaniline	30.0	27.8		ug/L		93	41 - 135
Nitrobenzene	30.0	20.7		ug/L		69	47 - 120
2-Nitrophenol	30.0	22.9		ug/L		76	28 - 136
4-Nitrophenol	60.0	47.8		ug/L		80	10 - 150
N-Nitrosodimethylamine	30.0	21.8		ug/L		73	22 - 148
N-Nitrosodi-n-propylamine	30.0	23.9		ug/L		80	44 - 120
N-Nitrosodiphenylamine	29.8	23.4		ug/L		78	56 - 120
Pentachlorophenol	60.0	38.0		ug/L		63	15 - 141
Phenol	30.0	22.1		ug/L		74	33 - 120
Pyridine	60.0	34.6		ug/L		58	26 - 120

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

Lab Sample ID: LCS 400-462249/2-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	20.7		ug/L		69	51 - 129
2,4,5-Trichlorophenol	30.0	23.9		ug/L		80	38 - 147
2,4,6-Trichlorophenol	30.0	22.2		ug/L		74	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*34 - 120*
2-Fluorophenol	*46*		*10 - 120*
Nitrobenzene-d5	*72*		*27 - 120*
Phenol-d5	*60*		*10 - 120*
Terphenyl-d14	*83*		*53 - 125*
2,4,6-Tribromophenol	*74*		*15 - 135*

Lab Sample ID: LCS 400-462249/4-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	9.94	J	ug/L		33	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*109*		*34 - 120*
2-Fluorophenol	*64*		*10 - 120*
Nitrobenzene-d5	*71*		*27 - 120*
Phenol-d5	*13*		*10 - 120*
Terphenyl-d14	*108*		*53 - 125*
2,4,6-Tribromophenol	*104*		*15 - 135*

Lab Sample ID: LCSD 400-462249/3-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	25.4		ug/L		85	29 - 120	19	30
Benzoic acid	117	89.7		ug/L		77	10 - 150	9	30
Benzyl alcohol	30.0	15.4		ug/L		51	19 - 125	24	30
Bis(2-chloroethoxy)methane	30.0	23.3		ug/L		78	45 - 120	8	30
Bis(2-chloroethyl)ether	30.0	24.2		ug/L		81	48 - 120	3	30
bis (2-chloroisopropyl) ether	30.0	23.1		ug/L		77	30 - 125	10	30
Bis(2-ethylhexyl) phthalate	30.0	28.5		ug/L		95	48 - 150	7	30
4-Bromophenyl phenyl ether	30.0	23.6		ug/L		79	55 - 122	8	30
Butyl benzyl phthalate	30.0	27.3		ug/L		91	46 - 145	7	30
4-Chloroaniline	30.0	22.5		ug/L		75	30 - 120	25	30
4-Chloro-3-methylphenol	30.0	25.4		ug/L		85	39 - 140	8	30
2-Chloronaphthalene	30.0	24.4		ug/L		81	52 - 120	16	30
2-Chlorophenol	30.0	22.9		ug/L		76	34 - 120	13	30
4-Chlorophenyl phenyl ether	30.0	24.5		ug/L		82	58 - 124	10	30
Dibenz[a,h]acridine	30.0	25.9		ug/L		86	46 - 149	8	30
Dibenzofuran	30.0	25.5		ug/L		85	58 - 123	9	30

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

Lab Sample ID: LCSD 400-462249/3-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	39.3		ug/L		98	39 - 135	3	30
2,4-Dichlorophenol	30.0	24.5		ug/L		82	39 - 128	9	30
Diethyl phthalate	30.0	28.0		ug/L		93	44 - 146	4	30
2,4-Dimethylphenol	30.0	24.9		ug/L		83	44 - 120	8	30
Dimethyl phthalate	30.0	25.6		ug/L		85	50 - 131	6	30
Di-n-butyl phthalate	30.0	28.5		ug/L		95	55 - 131	8	30
4,6-Dinitro-ortho-cresol	60.0	58.8		ug/L		98	10 - 150	10	30
2,4-Dinitrophenol	60.0	61.9		ug/L		103	10 - 150	9	30
2,4-Dinitrotoluene	30.0	28.0		ug/L		93	58 - 140	7	30
2,6-Dinitrotoluene	30.0	25.8		ug/L		86	57 - 130	6	30
Di-n-octyl phthalate	30.0	28.9		ug/L		96	50 - 150	8	30
1,4-Dioxane	30.0	17.8		ug/L		59	25 - 120	15	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.2		ug/L		84	47 - 123	8	30
Hexachlorobenzene	30.0	25.2		ug/L		84	52 - 131	8	30
Hexachlorocyclopentadiene	30.0	6.73	J *	ug/L		22	10 - 129	38	30
Hexachloroethane	30.0	19.8		ug/L		66	41 - 120	19	30
Indene	30.0	28.5		ug/L		95	47 - 120	17	30
Isophorone	30.0	23.7		ug/L		79	49 - 120	10	30
2-Methylphenol	30.0	30.3		ug/L		101	39 - 123	8	30
3 & 4 Methylphenol	30.0	23.6		ug/L		79	38 - 121	6	30
2-Nitroaniline	30.0	25.4		ug/L		85	47 - 150	8	30
3-Nitroaniline	30.0	24.2		ug/L		81	34 - 132	5	30
4-Nitroaniline	30.0	29.4		ug/L		98	41 - 135	6	30
Nitrobenzene	30.0	22.7		ug/L		76	47 - 120	9	30
2-Nitrophenol	30.0	25.3		ug/L		84	28 - 136	10	30
4-Nitrophenol	60.0	49.5		ug/L		83	10 - 150	4	30
N-Nitrosodimethylamine	30.0	25.3		ug/L		84	22 - 148	15	30
N-Nitrosodi-n-propylamine	30.0	26.4		ug/L		88	44 - 120	10	30
N-Nitrosodiphenylamine	29.8	24.8		ug/L		83	56 - 120	6	30
Pentachlorophenol	60.0	42.1		ug/L		70	15 - 141	10	30
Phenol	30.0	25.5		ug/L		85	33 - 120	14	30
Pyridine	60.0	39.4		ug/L		66	26 - 120	13	30
Quinoline	30.0	22.9		ug/L		76	51 - 129	10	30
2,4,5-Trichlorophenol	30.0	26.0		ug/L		87	38 - 147	8	30
2,4,6-Trichlorophenol	30.0	24.0		ug/L		80	36 - 139	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*56*		*10 - 120*
Nitrobenzene-d5	*81*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*89*		*53 - 125*
2,4,6-Tribromophenol	*80*		*15 - 135*

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

Lab Sample ID: LCSD 400-462249/5-A
Matrix: Water
Analysis Batch: 463349

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		0.6	10 - 120	192	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*34 - 120*
2-Fluorophenol	*34*		*10 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*54*		*15 - 135*

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 463349

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND	F1	28.8	ND	F1	ug/L		0	10 - 143
Benzoic acid	ND		112	87.7		ug/L		78	10 - 134
Benzyl alcohol	ND	F2	28.8	2.90	J	ug/L		10	10 - 154
Bis(2-chloroethoxy)methane	ND		28.8	21.3		ug/L		74	14 - 147
Bis(2-chloroethyl)ether	ND		28.8	18.6		ug/L		65	28 - 130
bis (2-chloroisopropyl) ether	ND		28.8	21.6		ug/L		75	10 - 141
Bis(2-ethylhexyl) phthalate	5.6	J	28.8	26.8		ug/L		74	43 - 160
4-Bromophenyl phenyl ether	ND		28.8	22.3		ug/L		77	26 - 159
Butyl benzyl phthalate	ND		28.8	26.4		ug/L		92	43 - 151
4-Chloroaniline	ND	F2	28.8	5.27	J	ug/L		18	10 - 152
4-Chloro-3-methylphenol	ND		28.8	21.4		ug/L		74	17 - 156
2-Chloronaphthalene	ND		28.8	23.8		ug/L		83	10 - 155
2-Chlorophenol	ND		28.8	20.6		ug/L		71	19 - 130
4-Chlorophenyl phenyl ether	ND		28.8	23.8		ug/L		83	25 - 161
Dibenz[a,h]acridine	ND		28.8	24.2		ug/L		84	42 - 147
Dibenzofuran	ND		28.8	24.5		ug/L		85	18 - 157
3,3'-Dichlorobenzidine	ND		38.4	27.9		ug/L		73	10 - 172
2,4-Dichlorophenol	ND		28.8	22.0		ug/L		77	16 - 147
Diethyl phthalate	ND		28.8	26.6		ug/L		92	23 - 160
2,4-Dimethylphenol	ND		28.8	22.6		ug/L		78	25 - 146
Dimethyl phthalate	ND		28.8	23.8		ug/L		83	11 - 158
Di-n-butyl phthalate	ND		28.8	27.7		ug/L		96	28 - 162
4,6-Dinitro-ortho-cresol	ND		57.6	54.5		ug/L		95	10 - 168
2,4-Dinitrophenol	ND		57.6	59.9		ug/L		104	10 - 166
2,4-Dinitrotoluene	ND		28.8	26.4		ug/L		92	26 - 158
2,6-Dinitrotoluene	ND		28.8	24.4		ug/L		85	19 - 157
Di-n-octyl phthalate	ND		28.8	26.7		ug/L		93	42 - 150
1,4-Dioxane	ND		28.8	14.8		ug/L		51	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.8	23.7		ug/L		82	19 - 162
Hexachlorobenzene	ND		28.8	23.3		ug/L		81	45 - 145
Hexachlorocyclopentadiene	ND	*	28.8	10.6	J	ug/L		37	10 - 151
Hexachloroethane	ND		28.8	17.8		ug/L		62	29 - 130

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

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 463349

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	ND		28.8	22.9		ug/L		79	22 - 130
Isophorone	ND		28.8	21.3		ug/L		74	24 - 144
2-Methylphenol	ND		28.8	28.1		ug/L		97	22 - 130
3 & 4 Methylphenol	ND		28.8	25.1		ug/L		87	31 - 130
2-Nitroaniline	ND		28.8	22.9		ug/L		79	10 - 162
3-Nitroaniline	ND		28.8	20.5		ug/L		71	10 - 163
4-Nitroaniline	ND		28.8	26.2		ug/L		91	10 - 162
Nitrobenzene	ND		28.8	24.3		ug/L		84	34 - 135
2-Nitrophenol	ND		28.8	22.6		ug/L		79	27 - 134
4-Nitrophenol	ND		57.6	53.9		ug/L		94	10 - 175
N-Nitrosodimethylamine	ND		28.8	22.7		ug/L		79	10 - 139
N-Nitrosodi-n-propylamine	ND		28.8	24.8		ug/L		86	13 - 147
N-Nitrosodiphenylamine	ND		28.6	21.7		ug/L		76	31 - 150
Pentachlorophenol	ND		57.6	44.1		ug/L		77	10 - 180
Phenol	ND		28.8	20.1		ug/L		70	23 - 130
Pyridine	ND		57.6	24.2		ug/L		42	10 - 130
Quinoline	ND	F2	28.8	9.35	J	ug/L		32	10 - 180
2,4,5-Trichlorophenol	ND		28.8	23.6		ug/L		82	43 - 137
2,4,6-Trichlorophenol	ND		28.8	21.8		ug/L		76	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*64*		*10 - 120*
Terphenyl-d14	*91*		*53 - 125*
2,4,6-Tribromophenol	*79*		*15 - 135*

Lab Sample ID: 400-177927-3 MSD
Matrix: Water
Analysis Batch: 463349

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND	F1	28.9	ND	F1	ug/L		0	10 - 143	NC	63
Benzoic acid	ND		112	109		ug/L		97	10 - 134	22	49
Benzyl alcohol	ND	F2	28.9	11.4	F2	ug/L		39	10 - 154	119	37
Bis(2-chloroethoxy)methane	ND		28.9	25.5		ug/L		88	14 - 147	18	70
Bis(2-chloroethyl)ether	ND		28.9	22.2		ug/L		77	28 - 130	18	42
bis (2-chloroisopropyl) ether	ND		28.9	24.9		ug/L		86	10 - 141	14	41
Bis(2-ethylhexyl) phthalate	5.6	J	28.9	34.2		ug/L		99	43 - 160	24	35
4-Bromophenyl phenyl ether	ND		28.9	26.8		ug/L		93	26 - 159	18	30
Butyl benzyl phthalate	ND		28.9	31.9		ug/L		110	43 - 151	19	32
4-Chloroaniline	ND	F2	28.9	19.1	F2	ug/L		66	10 - 152	114	94
4-Chloro-3-methylphenol	ND		28.9	27.2		ug/L		94	17 - 156	24	40
2-Chloronaphthalene	ND		28.9	27.8		ug/L		96	10 - 155	15	29
2-Chlorophenol	ND		28.9	26.7		ug/L		92	19 - 130	26	42
4-Chlorophenyl phenyl ether	ND		28.9	28.1		ug/L		97	25 - 161	17	27
Dibenz[a,h]acridine	ND		28.9	25.7		ug/L		89	42 - 147	6	40

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

Lab Sample ID: 400-177927-3 MSD
Matrix: Water
Analysis Batch: 463349

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenzofuran	ND		28.9	28.7		ug/L		99	18 - 157	16	29
3,3'-Dichlorobenzidine	ND		38.5	32.5		ug/L		84	10 - 172	15	58
2,4-Dichlorophenol	ND		28.9	27.3		ug/L		94	16 - 147	21	43
Diethyl phthalate	ND		28.9	31.8		ug/L		110	23 - 160	18	40
2,4-Dimethylphenol	ND		28.9	27.2		ug/L		94	25 - 146	19	47
Dimethyl phthalate	ND		28.9	28.9		ug/L		100	11 - 158	19	36
Di-n-butyl phthalate	ND		28.9	32.6		ug/L		113	28 - 162	16	32
4,6-Dinitro-ortho-cresol	ND		57.8	69.2		ug/L		120	10 - 168	24	42
2,4-Dinitrophenol	ND		57.8	72.0		ug/L		125	10 - 166	18	36
2,4-Dinitrotoluene	ND		28.9	32.2		ug/L		111	26 - 158	20	28
2,6-Dinitrotoluene	ND		28.9	29.5		ug/L		102	19 - 157	19	28
Di-n-octyl phthalate	ND		28.9	33.1		ug/L		114	42 - 150	21	35
1,4-Dioxane	ND		28.9	18.6		ug/L		64	10 - 130	23	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.9	28.1		ug/L		97	19 - 162	17	40
Hexachlorobenzene	ND		28.9	28.5		ug/L		99	45 - 145	20	33
Hexachlorocyclopentadiene	ND	*	28.9	14.0	J	ug/L		48	10 - 151	27	50
Hexachloroethane	ND		28.9	21.8		ug/L		75	29 - 130	20	41
Indene	ND		28.9	26.5		ug/L		92	22 - 130	15	40
Isophorone	ND		28.9	25.3		ug/L		88	24 - 144	17	33
2-Methylphenol	ND		28.9	35.1		ug/L		122	22 - 130	22	47
3 & 4 Methylphenol	ND		28.9	29.0		ug/L		100	31 - 130	15	47
2-Nitroaniline	ND		28.9	27.9		ug/L		97	10 - 162	20	33
3-Nitroaniline	ND		28.9	24.9		ug/L		86	10 - 163	20	39
4-Nitroaniline	ND		28.9	31.2		ug/L		108	10 - 162	17	50
Nitrobenzene	ND		28.9	28.1		ug/L		97	34 - 135	15	35
2-Nitrophenol	ND		28.9	28.3		ug/L		98	27 - 134	22	43
4-Nitrophenol	ND		57.8	69.2		ug/L		120	10 - 175	25	82
N-Nitrosodimethylamine	ND		28.9	27.3		ug/L		94	10 - 139	18	62
N-Nitrosodi-n-propylamine	ND		28.9	29.2		ug/L		101	13 - 147	16	36
N-Nitrosodiphenylamine	ND		28.7	25.7		ug/L		90	31 - 150	17	34
Pentachlorophenol	ND		57.8	55.7		ug/L		96	10 - 180	23	42
Phenol	ND		28.9	26.5		ug/L		92	23 - 130	27	52
Pyridine	ND		57.8	39.2		ug/L		68	10 - 130	47	55
Quinoline	ND	F2	28.9	25.5	F2	ug/L		88	10 - 180	93	40
2,4,5-Trichlorophenol	ND		28.9	30.2		ug/L		105	43 - 137	25	42
2,4,6-Trichlorophenol	ND		28.9	27.4		ug/L		95	42 - 135	23	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*34 - 120*
2-Fluorophenol	*68*		*10 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Phenol-d5	*82*		*10 - 120*
Terphenyl-d14	*105*		*53 - 125*
2,4,6-Tribromophenol	*97*		*15 - 135*

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

Lab Sample ID: MB 400-462249/1-A
Matrix: Water
Analysis Batch: 462762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
Anthracene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Chrysene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Fluoranthene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
Fluorene	ND		0.20	0.021	ug/L		10/18/19 23:17	10/23/19 21:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/18/19 23:17	10/23/19 21:26	1
Phenanthrene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
Pyrene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/18/19 23:17	10/23/19 21:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*140*	*X*	*33 - 138*	*10/18/19 23:17*	*10/23/19 21:26*	*1*
2-Fluorobiphenyl	*97*		*15 - 122*	*10/18/19 23:17*	*10/23/19 21:26*	*1*
Nitrobenzene-d5	*93*		*19 - 130*	*10/18/19 23:17*	*10/23/19 21:26*	*1*

Lab Sample ID: LCS 400-462249/2-A
Matrix: Water
Analysis Batch: 462762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	19.2		ug/L		64	41 - 120
Acenaphthylene	30.0	19.3		ug/L		64	44 - 120
Anthracene	30.0	18.0		ug/L		60	49 - 120
Benzo[a]anthracene	30.0	19.3		ug/L		64	61 - 135
Benzo[a]pyrene	30.0	16.6		ug/L		55	52 - 120
Benzo[b]fluoranthene	30.0	17.5		ug/L		58	53 - 134
Benzo[g,h,i]perylene	30.0	16.3		ug/L		54	47 - 133
Benzo[k]fluoranthene	30.0	19.9		ug/L		66	57 - 134
Chrysene	30.0	19.5		ug/L		65	55 - 122
Dibenz(a,h)anthracene	30.0	19.3		ug/L		64	48 - 146
Fluoranthene	30.0	20.0		ug/L		67	54 - 128
Fluorene	30.0	23.0		ug/L		77	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	17.1		ug/L		57	43 - 142
Phenanthrene	30.0	19.1		ug/L		64	48 - 120
Pyrene	30.0	23.5		ug/L		78	48 - 132
1-Methylnaphthalene	30.0	16.7		ug/L		56	41 - 120
2-Methylnaphthalene	30.0	16.2		ug/L		54	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*91*		*33 - 138*

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

Lab Sample ID: LCS 400-462249/2-A
Matrix: Water
Analysis Batch: 462762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462249

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	71		15 - 122
Nitrobenzene-d5	65		19 - 130

Lab Sample ID: LCSD 400-462249/3-A
Matrix: Water
Analysis Batch: 462762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	21.4		ug/L		71	41 - 120	11	56
Acenaphthylene	30.0	21.8		ug/L		73	44 - 120	12	56
Anthracene	30.0	21.0		ug/L		70	49 - 120	16	51
Benzo[a]anthracene	30.0	21.6		ug/L		72	61 - 135	11	49
Benzo[a]pyrene	30.0	19.6		ug/L		65	52 - 120	17	50
Benzo[b]fluoranthene	30.0	20.9		ug/L		70	53 - 134	18	54
Benzo[g,h,i]perylene	30.0	18.7		ug/L		62	47 - 133	14	50
Benzo[k]fluoranthene	30.0	21.6		ug/L		72	57 - 134	8	52
Chrysene	30.0	21.6		ug/L		72	55 - 122	10	50
Dibenz(a,h)anthracene	30.0	22.0		ug/L		73	48 - 146	13	50
Fluoranthene	30.0	22.6		ug/L		75	54 - 128	12	52
Fluorene	30.0	25.2		ug/L		84	45 - 125	9	56
Indeno[1,2,3-cd]pyrene	30.0	19.1		ug/L		64	43 - 142	11	51
Phenanthrene	30.0	21.0		ug/L		70	48 - 120	9	56
Pyrene	30.0	25.2		ug/L		84	48 - 132	7	52
1-Methylnaphthalene	30.0	19.2		ug/L		64	41 - 120	14	55
2-Methylnaphthalene	30.0	18.4		ug/L		61	32 - 124	12	57

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	96		33 - 138
2-Fluorobiphenyl	81		15 - 122
Nitrobenzene-d5	61		19 - 130

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 463641

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		28.8	23.0		ug/L		80	35 - 113
Acenaphthylene	ND		28.8	25.2		ug/L		87	41 - 118
Anthracene	ND		28.8	21.9		ug/L		76	45 - 122
Benzo[a]anthracene	ND		28.8	20.5		ug/L		71	55 - 133
Benzo[a]pyrene	ND		28.8	22.7		ug/L		79	50 - 108
Benzo[b]fluoranthene	ND		28.8	23.0		ug/L		80	50 - 128
Benzo[g,h,i]perylene	ND		28.8	18.5		ug/L		64	46 - 133
Benzo[k]fluoranthene	ND		28.8	22.8		ug/L		79	52 - 128
Chrysene	ND		28.8	20.6		ug/L		72	52 - 116
Dibenz(a,h)anthracene	ND		28.8	21.6		ug/L		75	52 - 143
Fluoranthene	ND		28.8	22.6		ug/L		79	32 - 150
Fluorene	ND		28.8	24.8		ug/L		86	15 - 150

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

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 463641

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	ND		28.8	20.6		ug/L		72	41 - 141
Phenanthrene	ND		28.8	20.9		ug/L		72	36 - 125
Pyrene	ND		28.8	19.3		ug/L		67	41 - 127
1-Methylnaphthalene	ND		28.8	19.6		ug/L		68	10 - 150
2-Methylnaphthalene	ND		28.8	20.4		ug/L		71	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*66*		*33 - 138*
2-Fluorobiphenyl	*72*		*15 - 122*
Nitrobenzene-d5	*65*		*19 - 130*

Lab Sample ID: 400-177927-3 MSD
Matrix: Water
Analysis Batch: 463641

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 462249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.9	27.7		ug/L		96	35 - 113	18	49
Acenaphthylene	ND		28.9	29.6		ug/L		103	41 - 118	16	48
Anthracene	ND		28.9	25.2		ug/L		87	45 - 122	14	56
Benzo[a]anthracene	ND		28.9	24.5		ug/L		85	55 - 133	17	57
Benzo[a]pyrene	ND		28.9	26.4		ug/L		91	50 - 108	15	59
Benzo[b]fluoranthene	ND		28.9	27.2		ug/L		94	50 - 128	17	62
Benzo[g,h,i]perylene	ND		28.9	23.0		ug/L		80	46 - 133	21	58
Benzo[k]fluoranthene	ND		28.9	27.3		ug/L		95	52 - 128	18	58
Chrysene	ND		28.9	24.5		ug/L		85	52 - 116	17	59
Dibenz(a,h)anthracene	ND		28.9	26.6		ug/L		92	52 - 143	21	60
Fluoranthene	ND		28.9	28.1		ug/L		97	32 - 150	22	59
Fluorene	ND		28.9	28.9		ug/L		100	15 - 150	15	49
Indeno[1,2,3-cd]pyrene	ND		28.9	25.5		ug/L		88	41 - 141	21	58
Phenanthrene	ND		28.9	25.2		ug/L		87	36 - 125	19	69
Pyrene	ND		28.9	22.6		ug/L		78	41 - 127	16	58
1-Methylnaphthalene	ND		28.9	22.6		ug/L		78	10 - 150	14	66
2-Methylnaphthalene	ND		28.9	25.2		ug/L		87	10 - 150	21	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*76*		*33 - 138*
2-Fluorobiphenyl	*84*		*15 - 122*
Nitrobenzene-d5	*76*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462993/1-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462993

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		10/24/19 11:09	10/25/19 02:35	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/24/19 11:09	10/25/19 02:35	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-462993/1-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462993

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	74		51 - 149	10/24/19 11:09	10/25/19 02:35	1

Lab Sample ID: LCS 400-462993/2-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462993

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	0.107		ug/L		107	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	80		51 - 149

Lab Sample ID: LCSD 400-462993/3-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462993

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.0939		ug/L		94	60 - 140	5	30
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140	4	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	82		51 - 149

Lab Sample ID: MB 400-463424/1-A
Matrix: Water
Analysis Batch: 463461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 463424

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		10/28/19 11:15	10/28/19 15:03	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/28/19 11:15	10/28/19 15:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	75		51 - 149	10/28/19 11:15	10/28/19 15:03	1

Lab Sample ID: LCS 400-463424/2-A
Matrix: Water
Analysis Batch: 463461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 463424

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.0794		ug/L		79	60 - 140
1,2-Dibromoethane	0.100	0.102		ug/L		102	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	74		51 - 149

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-177927-3 MS
Matrix: Water
Analysis Batch: 463461

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 463424

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.0980	0.0824	H	ug/L		84	65 - 135
1,2-Dibromoethane	ND		0.0980	0.0980	H	ug/L		100	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*51 - 149*

Lab Sample ID: 400-177927-3 MSD
Matrix: Water
Analysis Batch: 463461

Client Sample ID: MW14-ROX-101119
Prep Type: Total/NA
Prep Batch: 463424

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		0.100	0.0857	H	ug/L		85	65 - 135	4	20
1,2-Dibromoethane	ND		0.100	0.104	H	ug/L		103	65 - 135	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*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 # T364589 (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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # ISSUED

DATE: 10/11/19

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

EDD CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA | State: IL

AECOM Project / Task Number: Roxana Quarterly GW | 60592794 - 1.03.004 | 60592794 - 1.03.0044

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 B. Burleson

LAB USE ONLY

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ 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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-101119-8011	10/11/19	0000	Water	X					2			2		
	TB-ROX-10119-8260		0000		X					2	2				
	MW14-ROX-101119		1005		X			X		6	2	1	2	1	
	MW14-ROX-101119-MS		1005		X			X		6	2	1	2	1	
	MW14-ROX-101119-MSD		1005		X			X		6	2	1	2	1	
	P66-ROX-101119		1115		X			X		6	2	1	2	1	
	MW1-ROX-10119-FB		1240		X			X		6	2	1	2	1	
	MW1-ROX-101119	↓	1315	↓	X			X		6	2	1	2	1	

400-177927 COC

Relinquished by (Signature)	Received by (Signature)	Date	Time
B. Howell	Fedex: 1194 6302 0145 / 1194 6302 0156	10/11/19	1600
Relinquished by (Signature)	Received by (Signature): 1194 6302 0167	Date	Time
Relinquished by (Signature)	Received by (Signature)	Date: 10-12-19	Time: 8:21

Version: 14Dec15

custody seal #'s: 1090679 / 1090678 1090683 / 1090682
1090681 / 1090680 3.9°C, 4.4°C, 4.2°C IR

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10/31/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-177927-1

Login Number: 177927
List Number: 1
Creator: Brown, Nathan

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9°C, 4.4°C, 4.2°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-177927-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-178011-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/26/2019

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

Sample Identification	Sample Identification
TB-ROX-101419-8011	TB-ROX-101419-8260
MW10-ROX-101419	MW9-ROX-101419
MW3-ROX-101419	ROST3MW-ROX-101419
TB-ROX-101419-8011-SS	TB-ROX-101419-8260-SS
P93C-ROX-101419	P74-ROX-101419

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, laboratory case narrative indicated PAHs were detected in the method blank. The LCS/LCSD recovery for benzenethiol, and several SVOC LCS/LCSD RPDs were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in sample MW3-ROX-101419. Acetone and 2-chloroethyl vinyl ether MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW10-ROX-101419. The continuing calibration verifications for several SVOCs 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 400-462401/1-A	PAHs	Fluoranthene	0.0233 µg/L
MB 400-462401/1-A	PAHs	Pyrene	0.0235 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
P74-ROX-101419	PAHs	Fluoranthene	-	**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 400-462401/4-A/5-A	SVOCs	Benzenethiol	**0.8/2**	**90**	10-120/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	2-Chlorophenol	39/68	**53**	34-120/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	28/39	**33**	10-129/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	3&4 Methylphenol	58/79	**32**	38-121/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Phenol	38/74	**64**	33-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-101419	SVOCs	Benzenethiol	**UJ**
MW9-ROX-101419	SVOCs	Benzenethiol	**UJ**
MW3-ROX-101419	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-101419	SVOCs	Benzenethiol	**UJ**
P93C-ROX-101419	SVOCs	Benzenethiol	**UJ**
P74-ROX-101419	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW3-ROX-101419	SVOCs	Nitrobenzene-d_5	**24**	27-120
MW3-ROX-101419	SVOCs	Terphenyl-d_{14}	**30**	53-125

Analytical data that required qualification based on surrogate data are included in the table below.

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-101419	SVOCs	Aniline	**UJ**
MW3-ROX-101419	SVOCs	Bis(2-chloroethoxy)methane	**UJ**
MW3-ROX-101419	SVOCs	bis(2-chloroethyl)ether	**UJ**
MW3-ROX-101419	SVOCs	bis (2-chloroisopropyl) ether	**UJ**
MW3-ROX-101419	SVOCs	Bis(2-ethylhexyl) phthalate	**UJ**
MW3-ROX-101419	SVOCs	4-Bromophenyl phenyl ether	**UJ**
MW3-ROX-101419	SVOCs	Butyl benzyl phthalate	**UJ**
MW3-ROX-101419	SVOCs	4-Chloroaniline	**UJ**
MW3-ROX-101419	SVOCs	2-Chloronaphthalene	**UJ**
MW3-ROX-101419	SVOCs	4-Chlorophenyl phenyl ether	**UJ**
MW3-ROX-101419	SVOCs	Dibenz[a,h]acridine	**UJ**
MW3-ROX-101419	SVOCs	Dibenzofuran	**UJ**
MW3-ROX-101419	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW3-ROX-101419	SVOCs	Diethyl phthalate	**UJ**
MW3-ROX-101419	SVOCs	Dimethyl phthalate	**UJ**
MW3-ROX-101419	SVOCs	Di-n-butyl phthalate	**UJ**
MW3-ROX-101419	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW3-ROX-101419	SVOCs	2,4-Dinitrotoluene	**UJ**
MW3-ROX-101419	SVOCs	2,6-Dinitrotoluene	**UJ**
MW3-ROX-101419	SVOCs	Di-n-octyl phthalate	**UJ**
MW3-ROX-101419	SVOCs	1,4-Dioxane	**UJ**
MW3-ROX-101419	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	**UJ**
MW3-ROX-101419	SVOCs	Hexachlorobenzene	**UJ**
MW3-ROX-101419	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW3-ROX-101419	SVOCs	Hexachloroethane	**UJ**
MW3-ROX-101419	SVOCs	Indene	**UJ**
MW3-ROX-101419	SVOCs	Isophorone	**UJ**
MW3-ROX-101419	SVOCs	2-Nitroaniline	**UJ**
MW3-ROX-101419	SVOCs	3-Nitroaniline	**UJ**
MW3-ROX-101419	SVOCs	4-Nitroaniline	**UJ**
MW3-ROX-101419	SVOCs	Nitrobenzene	**UJ**
MW3-ROX-101419	SVOCs	N-Nitrosodimethylamine	**UJ**
MW3-ROX-101419	SVOCs	N-Nitrosodi-n-propylamine	**UJ**
MW3-ROX-101419	SVOCs	N-Nitrosodiphenylamine	**UJ**
MW3-ROX-101419	SVOCs	Pyridine	**UJ**
MW3-ROX-101419	SVOCs	Quinoline	**UJ**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample MW10-ROX-101419 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
MW10-ROX-101419	VOCs	Acetone	**38/36**	5	43-150/30
MW10-ROX-101419	VOCs	2-Chloroethyl vinyl ether	10/**0**	**NC**	10-150/50

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.

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-101419	VOCs	Acetone	**UJ**
MW10-ROX-101419	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; 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 are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-101419	SVOCs	Benzoic acid	**UJ**
MW10-ROX-101419	SVOCs	Benzyl alcohol	**UJ**
MW10-ROX-101419	SVOCs	Indene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW9-ROX-101419	SVOCs	Benzoic acid	**UJ**
MW9-ROX-101419	SVOCs	Benzyl alcohol	**UJ**
MW9-ROX-101419	SVOCs	Indene	**UJ**
MW3-ROX-101419	SVOCs	Benzoic acid	**UJ**
MW3-ROX-101419	SVOCs	Benzyl alcohol	**UJ**
ROST3MW-ROX-101419	SVOCs	Benzoic acid	**UJ**
ROST3MW-ROX-101419	SVOCs	Benzyl alcohol	**UJ**
ROST3MW-ROX-101419	SVOCs	Indene	**UJ**
P93C-ROX-101419	SVOCs	Benzoic acid	**UJ**
P74-ROX-101419	SVOCs	Benzoic acid	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-178011-1
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:
11/1/2019 2:56:15 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
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Reviewed 11/26/19
LK

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

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

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

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Case Narrative

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

Job ID: 400-178011-1

Job ID: 400-178011-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-178011-1

Comments
Results for sample, ROST4PZC-ROX-101419 (400-178011-6), are reported separately.

Receipt
The samples were received on 10/15/2019 8:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 8 coolers at receipt time were 1.3° C, 1.3° C, 2.7° C, 2.7° C, 3.9° C, 3.9° C, 4.6° C and 4.6° C.

GC/MS VOA
Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-451121 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-462744 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-462744 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-462744 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101419-8260 (400-178011-2), MW10-ROX-101419 (400-178011-3), MW9-ROX-101419 (400-178011-4), MW3-ROX-101419 (400-178011-5), ROST3MW-ROX-101419 (400-178011-7), TB-ROX-101419-8260-SS (400-178013-2), P93C-ROX-101419 (400-178013-3) and P74-ROX-101419 (400-178013-4). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: 2-Chlorophenol, 3 & 4 Methylphenol, Hexachlorocyclopentadiene and Phenol.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered above the upper control limit for 2-Methylphenol, Di-n-butyl phthalate and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered outside acceptance criteria, low biased, for Benzoic acid, Benzyl alcohol and Indene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect above reporting limit for these analytes, the data has been reported.

Job ID: 400-178011-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: Surrogate recovery was outside the control limits: MW3-ROX-101419 (400-178011-5). The sample is non-detect; therefore, the data have been reported. MW3-ROX-101419 (400-178011-5)

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463207 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, 2-Methylphenol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463207 recovered outside acceptance criteria, low biased, for Benzoic acid. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D LL: The method blank for preparation batch 400-462401 and analytical batch 400-462759 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 8270D LL: The continuing calibration verification (CCV) associated with batch 400-463641 recovered above the upper control limit for Benzo[a]pyrene, Benzo[b]fluoranthene and Benzo[k]fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA
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: 400-178011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-178011-1	TB-ROX-101419-8011	Water	10/14/19 00:00	10/15/19 08:47	
400-178011-2	TB-ROX-101419-8260	Water	10/14/19 00:00	10/15/19 08:47	
400-178011-3	MW10-ROX-101419	Water	10/14/19 09:30	10/15/19 08:47	
400-178011-4	MW9-ROX-101419	Water	10/14/19 10:15	10/15/19 08:47	
400-178011-5	MW3-ROX-101419	Water	10/14/19 11:10	10/15/19 08:47	
400-178011-7	ROST3MW-ROX-101419	Water	10/14/19 13:10	10/15/19 08:47	
400-178013-1	TB-ROX-101419-8011-SS	Water	10/14/19 00:00	10/15/19 08:47	
400-178013-2	TB-ROX-101419-8260-SS	Water	10/14/19 00:00	10/15/19 08:47	
400-178013-3	P93C-ROX-101419	Water	10/14/19 12:55	10/15/19 08:47	
400-178013-4	P74-ROX-101419	Water	10/14/19 14:05	10/15/19 08:47	

Detection Summary

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

Job ID: 400-178011-1

Client Sample ID: TB-ROX-101419-8011 — Lab Sample ID: 400-178011-1

No Detections.

Client Sample ID: TB-ROX-101419-8260 — Lab Sample ID: 400-178011-2

No Detections.

Client Sample ID: MW10-ROX-101419 — Lab Sample ID: 400-178011-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.46	J	1.0	0.38	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.025	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.026	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW9-ROX-101419 — Lab Sample ID: 400-178011-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.82	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW3-ROX-101419 — Lab Sample ID: 400-178011-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.39	J	1.0	0.38	ug/L	1		8260B	Total/NA
Carbon disulfide	0.88	J	1.0	0.50	ug/L	1		8260B	Total/NA
Ethylbenzene	2.9		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	5.0		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	6.9		5.0	1.6	ug/L	1		8260B	Total/NA
n-Butylbenzene	2.9		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	10		1.0	0.69	ug/L	1		8260B	Total/NA
Toluene	3.8		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	7.3	J	10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.44		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.071	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: ROST3MW-ROX-101419 — Lab Sample ID: 400-178011-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.62	J	1.0	0.50	ug/L	1		8260B	Total/NA
Acenaphthene	0.059	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Anthracene	0.028	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.045	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.15	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.027	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: TB-ROX-101419-8011-SS — Lab Sample ID: 400-178013-1

No Detections.

Client Sample ID: TB-ROX-101419-8260-SS — Lab Sample ID: 400-178013-2

No Detections.

Client Sample ID: P93C-ROX-101419 — Lab Sample ID: 400-178013-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.50	J	1.0	0.50	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.80	J	1.0	0.74	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.17	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-178011-1

Client Sample ID: P93C-ROX-101419 (Continued)

Lab Sample ID: 400-178013-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.17	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P74-ROX-101419

Lab Sample ID: 400-178013-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	33		1.0	0.38	ug/L	1		8260B	Total/NA
Carbon disulfide	0.67	J	1.0	0.50	ug/L	1		8260B	Total/NA
Toluene	1.9		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	2.2		1.0	0.82	ug/L	1		8260B	Total/NA
Xylenes, Total	1.9	J	10	1.6	ug/L	1		8260B	Total/NA
Fluoranthene	~~0.021~~	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.024	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.25		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.23		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: 400-178011-1

Client Sample ID: TB-ROX-101419-8011
Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		10/21/19 13:44	10/22/19 12:46	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/21/19 13:44	10/22/19 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*	*p*	*51 - 149*	*10/21/19 13:44*	*10/22/19 12:46*	*1*

Client Sample Results

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

Job ID: 400-178011-1

Client Sample ID: TB-ROX-101419-8260

Lab Sample ID: 400-178011-2

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

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			10/23/19 08:34	1
Acrolein	ND		20	10	ug/L			10/23/19 08:34	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:34	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:34	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:34	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:34	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:34	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:34	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:34	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:34	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:34	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:34	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:34	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:34	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:34	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:34	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:34	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:34	1

Client Sample ID: TB-ROX-101419-8260
Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-2
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			10/23/19 08:34	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:34	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:34	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:34	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:34	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:34	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:34	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*10/23/19 08:34*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*10/23/19 08:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/23/19 08:34*	*1*

Client Sample Results

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

Job ID: 400-178011-1

Client Sample ID: MW10-ROX-101419
Date Collected: 10/14/19 09:30
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/23/19 08:56	1
Acrolein	ND		20	10	ug/L			10/23/19 08:56	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:56	1
Benzene	0.46	J	1.0	0.38	ug/L			10/23/19 08:56	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:56	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:56	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:56	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:56	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/23/19 08:56	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:56	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:56	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:56	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:56	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:56	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:56	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:56	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:56	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:56	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:56	1

Client Sample ID: MW10-ROX-101419
Date Collected: 10/14/19 09:30
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-3
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			10/23/19 08:56	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:56	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:56	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:56	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:56	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:56	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:56	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*10/23/19 08:56*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*10/23/19 08:56*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/19 08:56*	*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		10/21/19 11:00	10/23/19 11:41	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 11:00	10/23/19 11:41	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:41	1
Phenanthrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1
1-Methylnaphthalene	0.025	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1
2-Methylnaphthalene	0.026	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*33 - 138*	*10/21/19 11:00*	*10/23/19 11:41*	*1*
2-Fluorobiphenyl	*78*		*15 - 122*	*10/21/19 11:00*	*10/23/19 11:41*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		19 - 130	10/21/19 11:00	10/23/19 11:41	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		10/21/19 11:00	10/24/19 01:13	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/21/19 11:00	10/24/19 01:13	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/21/19 11:00	10/24/19 01:13	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/21/19 11:00	10/24/19 01:13	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 11:00	10/24/19 01:13	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		10/21/19 11:00	10/24/19 01:13	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 11:00	10/24/19 01:13	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/21/19 11:00	10/24/19 01:13	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		10/21/19 11:00	10/24/19 01:13	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 11:00	10/24/19 01:13	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/21/19 11:00	10/24/19 01:13	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 11:00	10/24/19 01:13	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/21/19 11:00	10/24/19 01:13	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 11:00	10/24/19 01:13	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 11:00	10/24/19 01:13	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/21/19 11:00	10/24/19 01:13	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/21/19 11:00	10/24/19 01:13	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 11:00	10/24/19 01:13	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/24/19 01:13	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 11:00	10/24/19 01:13	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 11:00	10/24/19 01:13	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/24/19 01:13	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 11:00	10/24/19 01:13	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 11:00	10/24/19 01:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 11:00	10/24/19 01:13	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 11:00	10/24/19 01:13	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/24/19 01:13	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 11:00	10/24/19 01:13	1
Indene	ND	UJ	9.5	0.95	ug/L		10/21/19 11:00	10/24/19 01:13	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 11:00	10/24/19 01:13	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 11:00	10/24/19 01:13	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/24/19 01:13	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 11:00	10/24/19 01:13	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 11:00	10/24/19 01:13	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 11:00	10/24/19 01:13	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 11:00	10/24/19 01:13	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 11:00	10/24/19 01:13	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 11:00	10/24/19 01:13	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/21/19 11:00	10/24/19 01:13	1

Client Sample ID: MW10-ROX-101419

Lab Sample ID: 400-178011-3

Date Collected: 10/14/19 09:30
Date Received: 10/15/19 08:47

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		10/21/19 11:00	10/24/19 01:13	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 11:00	10/24/19 01:13	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/24/19 01:13	1
Phenol	ND	*	9.5	2.5	ug/L		10/21/19 11:00	10/24/19 01:13	1
Pyridine	ND		9.5	3.1	ug/L		10/21/19 11:00	10/24/19 01:13	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 11:00	10/24/19 01:13	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/24/19 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*34 - 120*	*10/21/19 11:00*	*10/24/19 01:13*	*1*
2-Fluorophenol	*39*		*10 - 120*	*10/21/19 11:00*	*10/24/19 01:13*	*1*
Nitrobenzene-d5	*85*		*27 - 120*	*10/21/19 11:00*	*10/24/19 01:13*	*1*
Phenol-d5	*58*		*10 - 120*	*10/21/19 11:00*	*10/24/19 01:13*	*1*
Terphenyl-d14	*92*		*53 - 125*	*10/21/19 11:00*	*10/24/19 01:13*	*1*
2,4,6-Tribromophenol	*90*		*15 - 135*	*10/21/19 11:00*	*10/24/19 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	0.0054	ug/L		10/21/19 13:44	10/22/19 13:09	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/21/19 13:44	10/22/19 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*51 - 149*	*10/21/19 13:44*	*10/22/19 13:09*	*1*

Client Sample ID: MW9-ROX-101419

Lab Sample ID: 400-178011-4

Date Collected: 10/14/19 10:15
Date Received: 10/15/19 08:47

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			10/23/19 09:18	1
Acrolein	ND		20	10	ug/L			10/23/19 09:18	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 09:18	1
Benzene	0.82	J	1.0	0.38	ug/L			10/23/19 09:18	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 09:18	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 09:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 09:18	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 09:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 09:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 09:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 09:18	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 09:18	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 09:18	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 09:18	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 09:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 09:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 09:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 09:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 09:18	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 09:18	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 09:18	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 09:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 09:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 09:18	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 09:18	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 09:18	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 09:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 09:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 09:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 09:18	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 09:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 09:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 09:18	1

Client Sample ID: MW9-ROX-101419

Lab Sample ID: 400-178011-4

Date Collected: 10/14/19 10:15
Date Received: 10/15/19 08:47

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			10/23/19 09:18	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 09:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 09:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 09:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 09:18	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 09:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 09:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 09:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 09:18	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 09:18	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 09:18	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 09:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 09:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 09:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 09:18	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 09:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 09:18	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 09:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*10/23/19 09:18*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*10/23/19 09:18*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 09:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 11:00	10/23/19 11:58	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:58	1
Phenanthrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*73*		*33 - 138*	*10/21/19 11:00*	*10/23/19 11:58*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*10/21/19 11:00*	*10/23/19 11:58*	*1*

Client Sample ID: MW9-ROX-101419
Date Collected: 10/14/19 10:15
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-4
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	10/21/19 11:00	10/23/19 11:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		10/21/19 11:00	10/24/19 00:48	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/21/19 11:00	10/24/19 00:48	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/21/19 11:00	10/24/19 00:48	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/21/19 11:00	10/24/19 00:48	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/21/19 11:00	10/24/19 00:48	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/21/19 11:00	10/24/19 00:48	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		10/21/19 11:00	10/24/19 00:48	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		10/21/19 11:00	10/24/19 00:48	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/21/19 11:00	10/24/19 00:48	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/21/19 11:00	10/24/19 00:48	1
4-Chloroaniline	ND		9.6	3.2	ug/L		10/21/19 11:00	10/24/19 00:48	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/21/19 11:00	10/24/19 00:48	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/21/19 11:00	10/24/19 00:48	1
2-Chlorophenol	ND	*	9.6	2.1	ug/L		10/21/19 11:00	10/24/19 00:48	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/21/19 11:00	10/24/19 00:48	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/21/19 11:00	10/24/19 00:48	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/21/19 11:00	10/24/19 00:48	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/21/19 11:00	10/24/19 00:48	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		10/21/19 11:00	10/24/19 00:48	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/21/19 11:00	10/24/19 00:48	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/21/19 11:00	10/24/19 00:48	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/21/19 11:00	10/24/19 00:48	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/21/19 11:00	10/24/19 00:48	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/21/19 11:00	10/24/19 00:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/21/19 11:00	10/24/19 00:48	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/21/19 11:00	10/24/19 00:48	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/24/19 00:48	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/21/19 11:00	10/24/19 00:48	1
Indene	ND	UJ	9.6	0.96	ug/L		10/21/19 11:00	10/24/19 00:48	1
Isophorone	ND		9.6	0.54	ug/L		10/21/19 11:00	10/24/19 00:48	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/21/19 11:00	10/24/19 00:48	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/24/19 00:48	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/21/19 11:00	10/24/19 00:48	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/21/19 11:00	10/24/19 00:48	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/21/19 11:00	10/24/19 00:48	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/21/19 11:00	10/24/19 00:48	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/21/19 11:00	10/24/19 00:48	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/21/19 11:00	10/24/19 00:48	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		10/21/19 11:00	10/24/19 00:48	1

Client Sample ID: MW9-ROX-101419
Date Collected: 10/14/19 10:15
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/21/19 11:00	10/24/19 00:48	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/21/19 11:00	10/24/19 00:48	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/24/19 00:48	1
Phenol	ND	*	9.6	2.5	ug/L		10/21/19 11:00	10/24/19 00:48	1
Pyridine	ND		9.6	3.1	ug/L		10/21/19 11:00	10/24/19 00:48	1
Quinoline	ND		9.6	5.7	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/21/19 11:00	10/24/19 00:48	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		10/21/19 11:00	10/24/19 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*34 - 120*	*10/21/19 11:00*	*10/24/19 00:48*	*1*
2-Fluorophenol	*15*		*10 - 120*	*10/21/19 11:00*	*10/24/19 00:48*	*1*
Nitrobenzene-d5	*76*		*27 - 120*	*10/21/19 11:00*	*10/24/19 00:48*	*1*
Phenol-d5	*30*		*10 - 120*	*10/21/19 11:00*	*10/24/19 00:48*	*1*
Terphenyl-d14	*87*		*53 - 125*	*10/21/19 11:00*	*10/24/19 00:48*	*1*
2,4,6-Tribromophenol	*51*		*15 - 135*	*10/21/19 11:00*	*10/24/19 00:48*	*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		10/21/19 13:44	10/22/19 13:33	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/21/19 13:44	10/22/19 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*51 - 149*	*10/21/19 13:44*	*10/22/19 13:33*	*1*

Client Sample ID: MW3-ROX-101419

Date Collected: 10/14/19 11:10
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-5
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			10/23/19 13:27	1
Acrolein	ND		20	10	ug/L			10/23/19 13:27	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 13:27	1
Benzene	0.39	J	1.0	0.38	ug/L			10/23/19 13:27	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 13:27	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 13:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 13:27	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 13:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 13:27	1
Carbon disulfide	0.88	J	1.0	0.50	ug/L			10/23/19 13:27	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 13:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 13:27	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 13:27	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 13:27	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 13:27	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 13:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 13:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 13:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Ethylbenzene	2.9		1.0	0.50	ug/L			10/23/19 13:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 13:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 13:27	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 13:27	1
Isopropylbenzene	5.0		1.0	0.53	ug/L			10/23/19 13:27	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 13:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 13:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 13:27	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 13:27	1
m-Xylene & p-Xylene	6.9		5.0	1.6	ug/L			10/23/19 13:27	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 13:27	1
n-Butylbenzene	2.9		1.0	0.76	ug/L			10/23/19 13:27	1
N-Propylbenzene	10		1.0	0.69	ug/L			10/23/19 13:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 13:27	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 13:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 13:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 13:27	1

Client Sample ID: MW3-ROX-101419
Date Collected: 10/14/19 11:10
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-5
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			10/23/19 13:27	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 13:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 13:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 13:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 13:27	1
Toluene	3.8		1.0	0.41	ug/L			10/23/19 13:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 13:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 13:27	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:27	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 13:27	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 13:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 13:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 13:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 13:27	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 13:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 13:27	1
Xylenes, Total	7.3	J	10	1.6	ug/L			10/23/19 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*10/23/19 13:27*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*10/23/19 13:27*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/23/19 13:27*	*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		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 11:00	10/23/19 12:15	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:15	1
Phenanthrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
1-Methylnaphthalene	0.44		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1
2-Methylnaphthalene	0.071	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*33*		*33 - 138*	*10/21/19 11:00*	*10/23/19 12:15*	*1*
2-Fluorobiphenyl	*37*		*15 - 122*	*10/21/19 11:00*	*10/23/19 12:15*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	32		19 - 130	10/21/19 11:00	10/23/19 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.5	3.6	ug/L		10/21/19 11:00	10/24/19 00:23	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/21/19 11:00	10/24/19 00:23	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/21/19 11:00	10/24/19 00:23	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/21/19 11:00	10/24/19 00:23	1
Bis(2-chloroethoxy)methane	ND	UJ	9.5	0.66	ug/L		10/21/19 11:00	10/24/19 00:23	1
Bis(2-chloroethyl)ether	ND	UJ	9.5	0.71	ug/L		10/21/19 11:00	10/24/19 00:23	1
bis (2-chloroisopropyl) ether	ND	UJ	9.5	0.77	ug/L		10/21/19 11:00	10/24/19 00:23	1
Bis(2-ethylhexyl) phthalate	ND	UJ	9.5	4.8	ug/L		10/21/19 11:00	10/24/19 00:23	1
4-Bromophenyl phenyl ether	ND	UJ	9.5	0.31	ug/L		10/21/19 11:00	10/24/19 00:23	1
Butyl benzyl phthalate	ND	UJ	9.5	0.66	ug/L		10/21/19 11:00	10/24/19 00:23	1
4-Chloroaniline	ND	UJ	9.5	3.2	ug/L		10/21/19 11:00	10/24/19 00:23	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 11:00	10/24/19 00:23	1
2-Chloronaphthalene	ND	UJ	9.5	0.50	ug/L		10/21/19 11:00	10/24/19 00:23	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 11:00	10/24/19 00:23	1
4-Chlorophenyl phenyl ether	ND	UJ	9.5	1.9	ug/L		10/21/19 11:00	10/24/19 00:23	1
Dibenz[a,h]acridine	ND	UJ	9.5	2.9	ug/L		10/21/19 11:00	10/24/19 00:23	1
Dibenzofuran	ND	UJ	9.5	0.50	ug/L		10/21/19 11:00	10/24/19 00:23	1
3,3'-Dichlorobenzidine	ND	UJ	9.5	2.5	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 11:00	10/24/19 00:23	1
Diethyl phthalate	ND	UJ	9.5	0.67	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/24/19 00:23	1
Dimethyl phthalate	ND	UJ	9.5	0.57	ug/L		10/21/19 11:00	10/24/19 00:23	1
Di-n-butyl phthalate	ND	UJ	9.5	2.6	ug/L		10/21/19 11:00	10/24/19 00:23	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.5	1.9	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,4-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		10/21/19 11:00	10/24/19 00:23	1
Di-n-octyl phthalate	ND	UJ	9.5	0.42	ug/L		10/21/19 11:00	10/24/19 00:23	1
1,4-Dioxane	ND	UJ	9.5	0.95	ug/L		10/21/19 11:00	10/24/19 00:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	UJ	9.5	0.95	ug/L		10/21/19 11:00	10/24/19 00:23	1
Hexachlorobenzene	ND	UJ	9.5	0.24	ug/L		10/21/19 11:00	10/24/19 00:23	1
Hexachlorocyclopentadiene	ND	* UJ	19	2.5	ug/L		10/21/19 11:00	10/24/19 00:23	1
Hexachloroethane	ND	UJ	9.5	4.0	ug/L		10/21/19 11:00	10/24/19 00:23	1
Indene	ND	UJ	9.5	0.95	ug/L		10/21/19 11:00	10/24/19 00:23	1
Isophorone	ND	UJ	9.5	0.54	ug/L		10/21/19 11:00	10/24/19 00:23	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 11:00	10/24/19 00:23	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/24/19 00:23	1
2-Nitroaniline	ND	UJ	9.5	2.1	ug/L		10/21/19 11:00	10/24/19 00:23	1
3-Nitroaniline	ND	UJ	9.5	1.7	ug/L		10/21/19 11:00	10/24/19 00:23	1
4-Nitroaniline	ND	UJ	9.5	2.4	ug/L		10/21/19 11:00	10/24/19 00:23	1
Nitrobenzene	ND	UJ	9.5	0.52	ug/L		10/21/19 11:00	10/24/19 00:23	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 11:00	10/24/19 00:23	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 11:00	10/24/19 00:23	1
N-Nitrosodimethylamine	ND	UJ	9.5	3.3	ug/L		10/21/19 11:00	10/24/19 00:23	1

Client Sample ID: MW3-ROX-101419

Date Collected: 10/14/19 11:10
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-5
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	UJ	9.5	3.1	ug/L		10/21/19 11:00	10/24/19 00:23	1
N-Nitrosodiphenylamine	ND	UJ	9.5	0.45	ug/L		10/21/19 11:00	10/24/19 00:23	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/24/19 00:23	1
Phenol	ND	*	9.5	2.5	ug/L		10/21/19 11:00	10/24/19 00:23	1
Pyridine	ND	UJ	9.5	3.1	ug/L		10/21/19 11:00	10/24/19 00:23	1
Quinoline	ND	UJ	9.5	5.7	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 11:00	10/24/19 00:23	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/24/19 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	34		34 - 120	10/21/19 11:00	10/24/19 00:23	1
2-Fluorophenol	10		10 - 120	10/21/19 11:00	10/24/19 00:23	1
Nitrobenzene-d5	24	X	27 - 120	10/21/19 11:00	10/24/19 00:23	1
Phenol-d5	16		10 - 120	10/21/19 11:00	10/24/19 00:23	1
Terphenyl-d14	30	X	53 - 125	10/21/19 11:00	10/24/19 00:23	1
2,4,6-Tribromophenol	26		15 - 135	10/21/19 11:00	10/24/19 00:23	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/21/19 13:44	10/22/19 13:56	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/21/19 13:44	10/22/19 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	85		51 - 149	10/21/19 13:44	10/22/19 13:56	1

Client Sample Results

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

Job ID: 400-178011-1

Client Sample ID: ROST3MW-ROX-101419

Lab Sample ID: 400-178011-7

Date Collected: 10/14/19 13:10
Date Received: 10/15/19 08:47

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			10/23/19 13:49	1
Acrolein	ND		20	10	ug/L			10/23/19 13:49	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 13:49	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 13:49	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 13:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 13:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 13:49	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 13:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 13:49	1
Carbon disulfide	0.62	J	1.0	0.50	ug/L			10/23/19 13:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 13:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 13:49	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 13:49	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 13:49	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 13:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 13:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 13:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 13:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 13:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 13:49	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 13:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 13:49	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 13:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 13:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 13:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 13:49	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 13:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 13:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 13:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 13:49	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 13:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 13:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 13:49	1

Client Sample ID: ROST3MW-ROX-101419

Lab Sample ID: 400-178011-7

Date Collected: 10/14/19 13:10
Date Received: 10/15/19 08:47

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			10/23/19 13:49	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 13:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 13:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 13:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 13:49	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 13:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 13:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 13:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 13:49	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 13:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 13:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 13:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 13:49	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 13:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 13:49	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*10/23/19 13:49*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/23/19 13:49*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 13:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.059	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
Anthracene	0.028	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 11:00	10/23/19 12:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 12:33	1
Phenanthrene	0.045	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
1-Methylnaphthalene	0.15	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1
2-Methylnaphthalene	0.027	J	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*33 - 138*	*10/21/19 11:00*	*10/23/19 12:33*	*1*
2-Fluorobiphenyl	*71*		*15 - 122*	*10/21/19 11:00*	*10/23/19 12:33*	*1*

Client Sample ID: ROST3MW-ROX-101419
Date Collected: 10/14/19 13:10
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	76		19 - 130	10/21/19 11:00	10/23/19 12:33	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		10/21/19 11:00	10/23/19 23:32	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/21/19 11:00	10/23/19 23:32	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/21/19 11:00	10/23/19 23:32	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:32	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:32	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/21/19 11:00	10/23/19 23:32	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 11:00	10/23/19 23:32	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/21/19 11:00	10/23/19 23:32	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/21/19 11:00	10/23/19 23:32	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:32	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/21/19 11:00	10/23/19 23:32	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 11:00	10/23/19 23:32	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/21/19 11:00	10/23/19 23:32	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 11:00	10/23/19 23:32	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:32	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/21/19 11:00	10/23/19 23:32	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/21/19 11:00	10/23/19 23:32	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 11:00	10/23/19 23:32	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:32	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 11:00	10/23/19 23:32	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 11:00	10/23/19 23:32	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/23/19 23:32	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 11:00	10/23/19 23:32	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:32	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 11:00	10/23/19 23:32	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/23/19 23:32	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 11:00	10/23/19 23:32	1
Indene	ND	UJ	9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:32	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 11:00	10/23/19 23:32	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 11:00	10/23/19 23:32	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/23/19 23:32	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 11:00	10/23/19 23:32	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 11:00	10/23/19 23:32	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 11:00	10/23/19 23:32	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 11:00	10/23/19 23:32	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 11:00	10/23/19 23:32	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 11:00	10/23/19 23:32	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:32	1

Client Sample ID: ROST3MW-ROX-101419

Lab Sample ID: 400-178011-7

Date Collected: 10/14/19 13:10
Date Received: 10/15/19 08:47

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		10/21/19 11:00	10/23/19 23:32	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 11:00	10/23/19 23:32	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/23/19 23:32	1
Phenol	ND	*	9.5	2.5	ug/L		10/21/19 11:00	10/23/19 23:32	1
Pyridine	ND		9.5	3.0	ug/L		10/21/19 11:00	10/23/19 23:32	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 11:00	10/23/19 23:32	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*34 - 120*	*10/21/19 11:00*	*10/23/19 23:32*	*1*
2-Fluorophenol	*24*		*10 - 120*	*10/21/19 11:00*	*10/23/19 23:32*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*10/21/19 11:00*	*10/23/19 23:32*	*1*
Phenol-d5	*46*		*10 - 120*	*10/21/19 11:00*	*10/23/19 23:32*	*1*
Terphenyl-d14	*86*		*53 - 125*	*10/21/19 11:00*	*10/23/19 23:32*	*1*
2,4,6-Tribromophenol	*85*		*15 - 135*	*10/21/19 11:00*	*10/23/19 23:32*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		10/21/19 13:44	10/22/19 14:43	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/21/19 13:44	10/22/19 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*10/21/19 13:44*	*10/22/19 14:43*	*1*

Client Sample Results

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

Job ID: 400-178011-1

Client Sample ID: TB-ROX-101419-8011-SS

Lab Sample ID: 400-178013-1

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

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		10/24/19 11:09	10/25/19 07:17	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 11:09	10/25/19 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*	*p*	*51 - 149*	*10/24/19 11:09*	*10/25/19 07:17*	*1*

Client Sample Results

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

Job ID: 400-178011-1

Client Sample ID: TB-ROX-101419-8260-SS

Lab Sample ID: 400-178013-2

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

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			10/24/19 15:25	1
Acrolein	ND		20	10	ug/L			10/24/19 15:25	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 15:25	1
Benzene	ND		1.0	0.38	ug/L			10/24/19 15:25	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 15:25	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 15:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 15:25	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 15:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/19 15:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 15:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/19 15:25	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 15:25	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 15:25	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 15:25	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 15:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 15:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 15:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 15:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 15:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 15:25	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 15:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/19 15:25	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 15:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 15:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 15:25	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/24/19 15:25	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/24/19 15:25	1
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 15:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 15:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/19 15:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 15:25	1
o-Xylene	ND		5.0	0.60	ug/L			10/24/19 15:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 15:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/19 15:25	1

Client Sample ID: TB-ROX-101419-8260-SS

Lab Sample ID: 400-178013-2

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

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			10/24/19 15:25	1
Styrene	ND		1.0	1.0	ug/L			10/24/19 15:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/19 15:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 15:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 15:25	1
Toluene	ND		1.0	0.41	ug/L			10/24/19 15:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 15:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 15:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 15:25	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 15:25	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 15:25	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 15:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/19 15:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/19 15:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/19 15:25	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 15:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 15:25	1
Xylenes, Total	ND		10	1.6	ug/L			10/24/19 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*78 - 118*		*10/24/19 15:25*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*10/24/19 15:25*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/24/19 15:25*	*1*

Client Sample ID: P93C-ROX-101419

Lab Sample ID: 400-178013-3

Date Collected: 10/14/19 12:55
Date Received: 10/15/19 08:47

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			10/24/19 17:15	1
Acrolein	ND		20	10	ug/L			10/24/19 17:15	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 17:15	1
Benzene	ND		1.0	0.38	ug/L			10/24/19 17:15	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 17:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 17:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 17:15	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 17:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/19 17:15	1
Carbon disulfide	0.50	J	1.0	0.50	ug/L			10/24/19 17:15	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 17:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/19 17:15	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 17:15	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 17:15	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 17:15	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 17:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 17:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 17:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 17:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 17:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 17:15	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 17:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/19 17:15	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 17:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 17:15	1
Methyl tert-butyl ether	0.80	J	1.0	0.74	ug/L			10/24/19 17:15	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/24/19 17:15	1
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 17:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 17:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/19 17:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 17:15	1
o-Xylene	ND		5.0	0.60	ug/L			10/24/19 17:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 17:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/19 17:15	1

Client Sample ID: P93C-ROX-101419
Date Collected: 10/14/19 12:55
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178013-3
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			10/24/19 17:15	1
Styrene	ND		1.0	1.0	ug/L			10/24/19 17:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/19 17:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 17:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 17:15	1
Toluene	ND		1.0	0.41	ug/L			10/24/19 17:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 17:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 17:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 17:15	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:15	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 17:15	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 17:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/19 17:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/19 17:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/19 17:15	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 17:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 17:15	1
Xylenes, Total	ND		10	1.6	ug/L			10/24/19 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*10/24/19 17:15*	*1*
Dibromofluoromethane	*107*		*81 - 121*		*10/24/19 17:15*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/24/19 17:15*	*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		10/21/19 11:00	10/25/19 00:02	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 11:00	10/25/19 00:02	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/25/19 00:02	1
Phenanthrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1
1-Methylnaphthalene	0.17	J	0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1
2-Methylnaphthalene	0.17	J	0.19	0.019	ug/L		10/21/19 11:00	10/25/19 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*116*		*33 - 138*	*10/21/19 11:00*	*10/25/19 00:02*	*1*
2-Fluorobiphenyl	*117*		*15 - 122*	*10/21/19 11:00*	*10/25/19 00:02*	*1*

Client Sample ID: P93C-ROX-101419
Date Collected: 10/14/19 12:55
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178013-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	123		19 - 130	10/21/19 11:00	10/25/19 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		10/21/19 11:00	10/25/19 21:50	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/21/19 11:00	10/25/19 21:50	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/21/19 11:00	10/25/19 21:50	1
Benzyl alcohol	ND		9.6	1.9	ug/L		10/21/19 11:00	10/25/19 21:50	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/21/19 11:00	10/25/19 21:50	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/21/19 11:00	10/25/19 21:50	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		10/21/19 11:00	10/25/19 21:50	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		10/21/19 11:00	10/25/19 21:50	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/21/19 11:00	10/25/19 21:50	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/21/19 11:00	10/25/19 21:50	1
4-Chloroaniline	ND		9.6	3.2	ug/L		10/21/19 11:00	10/25/19 21:50	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/21/19 11:00	10/25/19 21:50	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/21/19 11:00	10/25/19 21:50	1
2-Chlorophenol	ND	*	9.6	2.1	ug/L		10/21/19 11:00	10/25/19 21:50	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/21/19 11:00	10/25/19 21:50	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/21/19 11:00	10/25/19 21:50	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/21/19 11:00	10/25/19 21:50	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/21/19 11:00	10/25/19 21:50	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		10/21/19 11:00	10/25/19 21:50	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/21/19 11:00	10/25/19 21:50	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/21/19 11:00	10/25/19 21:50	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/21/19 11:00	10/25/19 21:50	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/21/19 11:00	10/25/19 21:50	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/21/19 11:00	10/25/19 21:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/21/19 11:00	10/25/19 21:50	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/21/19 11:00	10/25/19 21:50	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/25/19 21:50	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/21/19 11:00	10/25/19 21:50	1
Indene	ND		9.6	0.96	ug/L		10/21/19 11:00	10/25/19 21:50	1
Isophorone	ND		9.6	0.54	ug/L		10/21/19 11:00	10/25/19 21:50	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/21/19 11:00	10/25/19 21:50	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/25/19 21:50	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/21/19 11:00	10/25/19 21:50	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/21/19 11:00	10/25/19 21:50	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/21/19 11:00	10/25/19 21:50	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/21/19 11:00	10/25/19 21:50	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/21/19 11:00	10/25/19 21:50	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/21/19 11:00	10/25/19 21:50	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		10/21/19 11:00	10/25/19 21:50	1

Client Sample ID: P93C-ROX-101419
Date Collected: 10/14/19 12:55
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178013-3
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		10/21/19 11:00	10/25/19 21:50	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/21/19 11:00	10/25/19 21:50	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/25/19 21:50	1
Phenol	ND	*	9.6	2.5	ug/L		10/21/19 11:00	10/25/19 21:50	1
Pyridine	ND		9.6	3.1	ug/L		10/21/19 11:00	10/25/19 21:50	1
Quinoline	ND		9.6	5.7	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/21/19 11:00	10/25/19 21:50	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		10/21/19 11:00	10/25/19 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*34 - 120*	*10/21/19 11:00*	*10/25/19 21:50*	*1*
2-Fluorophenol	*48*		*10 - 120*	*10/21/19 11:00*	*10/25/19 21:50*	*1*
Nitrobenzene-d5	*92*		*27 - 120*	*10/21/19 11:00*	*10/25/19 21:50*	*1*
Phenol-d5	*75*		*10 - 120*	*10/21/19 11:00*	*10/25/19 21:50*	*1*
Terphenyl-d14	*100*		*53 - 125*	*10/21/19 11:00*	*10/25/19 21:50*	*1*
2,4,6-Tribromophenol	*93*		*15 - 135*	*10/21/19 11:00*	*10/25/19 21:50*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		10/24/19 11:09	10/25/19 07:40	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 11:09	10/25/19 07:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*10/24/19 11:09*	*10/25/19 07:40*	*1*

Client Sample Results

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

Job ID: 400-178011-1

Client Sample ID: P74-ROX-101419
Date Collected: 10/14/19 14:05
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178013-4
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			10/24/19 17:37	1
Acrolein	ND		20	10	ug/L			10/24/19 17:37	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 17:37	1
Benzene	33		1.0	0.38	ug/L			10/24/19 17:37	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 17:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 17:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 17:37	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 17:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/19 17:37	1
Carbon disulfide	0.67	J	1.0	0.50	ug/L			10/24/19 17:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 17:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/19 17:37	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 17:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 17:37	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 17:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 17:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 17:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 17:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 17:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 17:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 17:37	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 17:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/19 17:37	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 17:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 17:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 17:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/24/19 17:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/24/19 17:37	1
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 17:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 17:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/19 17:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 17:37	1
o-Xylene	ND		5.0	0.60	ug/L			10/24/19 17:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 17:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/19 17:37	1

Client Sample ID: P74-ROX-101419
Date Collected: 10/14/19 14:05
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178013-4
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			10/24/19 17:37	1
Styrene	ND		1.0	1.0	ug/L			10/24/19 17:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/19 17:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 17:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 17:37	1
Toluene	1.9		1.0	0.41	ug/L			10/24/19 17:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 17:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 17:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 17:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 17:37	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 17:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/19 17:37	1
1,2,4-Trimethylbenzene	2.2		1.0	0.82	ug/L			10/24/19 17:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/19 17:37	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 17:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 17:37	1
Xylenes, Total	1.9	J	10	1.6	ug/L			10/24/19 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*10/24/19 17:37*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*10/24/19 17:37*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/24/19 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		0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Fluoranthene	~~0.021~~	J B	0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 11:00	10/30/19 07:32	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/30/19 07:32	1
Phenanthrene	0.024	J	0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
1-Methylnaphthalene	0.25		0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1
2-Methylnaphthalene	0.23		0.19	0.019	ug/L		10/21/19 11:00	10/30/19 07:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*33 - 138*	*10/21/19 11:00*	*10/30/19 07:32*	*1*
2-Fluorobiphenyl	*84*		*15 - 122*	*10/21/19 11:00*	*10/30/19 07:32*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		19 - 130	10/21/19 11:00	10/30/19 07:32	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		10/21/19 11:00	10/25/19 22:15	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/21/19 11:00	10/25/19 22:15	1
Benzoic acid	ND	UJ	29	7.0	ug/L		10/21/19 11:00	10/25/19 22:15	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/25/19 22:15	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 11:00	10/25/19 22:15	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		10/21/19 11:00	10/25/19 22:15	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 11:00	10/25/19 22:15	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/21/19 11:00	10/25/19 22:15	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		10/21/19 11:00	10/25/19 22:15	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 11:00	10/25/19 22:15	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/21/19 11:00	10/25/19 22:15	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 11:00	10/25/19 22:15	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/21/19 11:00	10/25/19 22:15	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 11:00	10/25/19 22:15	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 11:00	10/25/19 22:15	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/21/19 11:00	10/25/19 22:15	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/21/19 11:00	10/25/19 22:15	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 11:00	10/25/19 22:15	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/25/19 22:15	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 11:00	10/25/19 22:15	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 11:00	10/25/19 22:15	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/25/19 22:15	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 11:00	10/25/19 22:15	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 11:00	10/25/19 22:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 11:00	10/25/19 22:15	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 11:00	10/25/19 22:15	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/25/19 22:15	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 11:00	10/25/19 22:15	1
Indene	ND		9.5	0.95	ug/L		10/21/19 11:00	10/25/19 22:15	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 11:00	10/25/19 22:15	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 11:00	10/25/19 22:15	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/25/19 22:15	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 11:00	10/25/19 22:15	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 11:00	10/25/19 22:15	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 11:00	10/25/19 22:15	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 11:00	10/25/19 22:15	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 11:00	10/25/19 22:15	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 11:00	10/25/19 22:15	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/21/19 11:00	10/25/19 22:15	1

Client Sample ID: P74-ROX-101419
Date Collected: 10/14/19 14:05
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178013-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/21/19 11:00	10/25/19 22:15	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 11:00	10/25/19 22:15	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/25/19 22:15	1
Phenol	ND	*	9.5	2.5	ug/L		10/21/19 11:00	10/25/19 22:15	1
Pyridine	ND		9.5	3.1	ug/L		10/21/19 11:00	10/25/19 22:15	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 11:00	10/25/19 22:15	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/25/19 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*34 - 120*	*10/21/19 11:00*	*10/25/19 22:15*	*1*
2-Fluorophenol	*46*		*10 - 120*	*10/21/19 11:00*	*10/25/19 22:15*	*1*
Nitrobenzene-d5	*88*		*27 - 120*	*10/21/19 11:00*	*10/25/19 22:15*	*1*
Phenol-d5	*72*		*10 - 120*	*10/21/19 11:00*	*10/25/19 22:15*	*1*
Terphenyl-d14	*94*		*53 - 125*	*10/21/19 11:00*	*10/25/19 22:15*	*1*
2,4,6-Tribromophenol	*90*		*15 - 135*	*10/21/19 11:00*	*10/25/19 22:15*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		10/24/19 11:09	10/25/19 08:04	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/24/19 11:09	10/25/19 08:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*10/24/19 11:09*	*10/25/19 08:04*	*1*

Definitions/Glossary

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

Job ID: 400-178011-1

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
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
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
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

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

Surrogate Summary

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

Job ID: 400-178011-1

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)
400-178011-2	TB-ROX-101419-8260	107	104	100
400-178011-3	MW10-ROX-101419	114	101	99
400-178011-3 MS	MW10-ROX-101419	104	105	97
400-178011-3 MSD	MW10-ROX-101419	99	107	97
400-178011-4	MW9-ROX-101419	113	104	98
400-178011-5	MW3-ROX-101419	108	104	97
400-178011-7	ROST3MW-ROX-101419	105	106	98
400-178013-2	TB-ROX-101419-8260-SS	114	100	100
400-178013-3	P93C-ROX-101419	113	107	95
400-178013-4	P74-ROX-101419	103	108	95
LCS 400-462744/1002	Lab Control Sample	105	110	97
LCS 400-462942/1002	Lab Control Sample	99	107	98
MB 400-462744/4	Method Blank	106	103	98
MB 400-462942/4	Method Blank	108	110	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-178011-3	MW10-ROX-101419	101	39	85	58	92	90
400-178011-4	MW9-ROX-101419	80	15	76	30	87	51
400-178011-5	MW3-ROX-101419	34	10	24 X	16	30 X	26
400-178011-7	ROST3MW-ROX-101419	80	24	74	46	86	85
400-178013-3	P93C-ROX-101419	98	48	92	75	100	93
400-178013-4	P74-ROX-101419	93	46	88	72	94	90
LCS 400-462401/2-A	Lab Control Sample	61	16	69	38	68	57
LCS 400-462401/4-A	Lab Control Sample	81	22	71	41	77	64
LCSD 400-462401/3-A	Lab Control Sample Dup	76	44	79	62	77	70
LCSD 400-462401/5-A	Lab Control Sample Dup	83	15	70	34	85	72
MB 400-462401/1-A	Method Blank	72	33	69	56	80	60

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-178011-1

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)
400-178011-3	MW10-ROX-101419	80	78	82
400-178011-4	MW9-ROX-101419	73	72	69
400-178011-5	MW3-ROX-101419	33	37	32
400-178011-7	ROST3MW-ROX-101419	74	71	76
400-178013-3	P93C-ROX-101419	116	117	123
400-178013-4	P74-ROX-101419	68	84	82
LCS 400-462401/2-A	Lab Control Sample	80	77	60
LCSD 400-462401/3-A	Lab Control Sample Dup	75	82	57
MB 400-462401/1-A	Method Blank	71	69	79

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)
400-178011-1	TB-ROX-101419-8011	77 p
400-178011-3	MW10-ROX-101419	116
400-178011-4	MW9-ROX-101419	121
400-178011-5	MW3-ROX-101419	85
400-178011-7	ROST3MW-ROX-101419	81
400-178013-1	TB-ROX-101419-8011-SS	73 p
400-178013-3	P93C-ROX-101419	80
400-178013-4	P74-ROX-101419	77
LCS 400-462432/2-A	Lab Control Sample	130
LCS 400-462993/2-A	Lab Control Sample	80
LCSD 400-462432/3-A	Lab Control Sample Dup	128
LCSD 400-462993/3-A	Lab Control Sample Dup	82
MB 400-462432/1-A	Method Blank	80
MB 400-462993/1-A	Method Blank	74

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-178011-1

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: 400-178011-1

Client Sample ID: TB-ROX-101419-8011

Lab Sample ID: 400-178011-1
Matrix: Water

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.8 mL	35 mL	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462569	10/22/19 12:46	KLR	TAL PEN

Client Sample ID: TB-ROX-101419-8260

Lab Sample ID: 400-178011-2
Matrix: Water

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 08:34	RS	TAL PEN

Client Sample ID: MW10-ROX-101419

Lab Sample ID: 400-178011-3
Matrix: Water

Date Collected: 10/14/19 09:30
Date Received: 10/15/19 08:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 08:56	RS	TAL PEN
Total/NA	Prep	3520C			1048.8 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/24/19 01:13	VC1	TAL PEN
Total/NA	Prep	3520C			1048.8 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 11:41	KJA	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462569	10/22/19 13:09	KLR	TAL PEN

Client Sample ID: MW9-ROX-101419

Lab Sample ID: 400-178011-4
Matrix: Water

Date Collected: 10/14/19 10:15
Date Received: 10/15/19 08:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 09:18	RS	TAL PEN
Total/NA	Prep	3520C			1046.6 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/24/19 00:48	VC1	TAL PEN
Total/NA	Prep	3520C			1046.6 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 11:58	KJA	TAL PEN
Total/NA	Prep	8011			36.1 mL	35 mL	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462569	10/22/19 13:33	KLR	TAL PEN

Client Sample ID: MW3-ROX-101419

Lab Sample ID: 400-178011-5
Matrix: Water

Date Collected: 10/14/19 11:10
Date Received: 10/15/19 08:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 13:27	RS	TAL PEN
Total/NA	Prep	3520C			1048.2 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/24/19 00:23	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-178011-1

Client Sample ID: MW3-ROX-101419

Lab Sample ID: 400-178011-5

Date Collected: 10/14/19 11:10
Date Received: 10/15/19 08:47

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1048.2 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 12:15	KJA	TAL PEN
Total/NA	Prep	8011			36.2 mL	35 mL	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462569	10/22/19 13:56	KLR	TAL PEN

Client Sample ID: ROST3MW-ROX-101419

Lab Sample ID: 400-178011-7

Date Collected: 10/14/19 13:10
Date Received: 10/15/19 08:47

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	462744	10/23/19 13:49	RS	TAL PEN
Total/NA	Prep	3520C			1050 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 23:32	VC1	TAL PEN
Total/NA	Prep	3520C			1050 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 12:33	KJA	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462569	10/22/19 14:43	KLR	TAL PEN

Client Sample ID: TB-ROX-101419-8011-SS

Lab Sample ID: 400-178013-1

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

Matrix: 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			35.6 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 07:17	KLR	TAL PEN

Client Sample ID: TB-ROX-101419-8260-SS

Lab Sample ID: 400-178013-2

Date Collected: 10/14/19 00:00
Date Received: 10/15/19 08:47

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	462942	10/24/19 15:25	CS	TAL PEN

Client Sample ID: P93C-ROX-101419

Lab Sample ID: 400-178013-3

Date Collected: 10/14/19 12:55
Date Received: 10/15/19 08:47

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	462942	10/24/19 17:15	CS	TAL PEN
Total/NA	Prep	3520C			1047 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 21:50	VC1	TAL PEN
Total/NA	Prep	3520C			1047 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/25/19 00:02	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 07:40	KLR	TAL PEN

Lab Chronicle

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

Job ID: 400-178011-1

Client Sample ID: P74-ROX-101419

Lab Sample ID: 400-178013-4

Date Collected: 10/14/19 14:05
Date Received: 10/15/19 08:47

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	462942	10/24/19 17:37	CS	TAL PEN
Total/NA	Prep	3520C			1048.8 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			463207	10/25/19 22:15	VC1	TAL PEN
Total/NA	Prep	3520C			1048.8 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			463641	10/30/19 07:32	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 08:04	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462401/1-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 21:01	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 09:56	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462432/1-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	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 08:28	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462744/4

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	462744	10/23/19 08:12	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462942/4

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	462942	10/24/19 12:09	CS	TAL PEN

Lab Chronicle

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

Job ID: 400-178011-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462993/1-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	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 02:35	KLR	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462401/2-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:27	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:14	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462401/4-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462432/2-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	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462493	10/21/19 18:27	KLR	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462744/1002

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	462744	10/23/19 07:16	RS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462942/1002

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	462942	10/24/19 11:09	CS	TAL PEN

Lab Chronicle

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

Job ID: 400-178011-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462993/2-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	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 02:59	KLR	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462401/3-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:52	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:31	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462401/5-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:42	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462432/3-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	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462493	10/21/19 18:51	KLR	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462993/3-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	462993	10/24/19 11:09	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 03:23	KLR	TAL PEN

Client Sample ID: MW10-ROX-101419

Lab Sample ID: 400-178011-3 MS

Date Collected: 10/14/19 09:30
Date Received: 10/15/19 08:47

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	462744	10/23/19 10:32	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-178011-1

Client Sample ID: MW10-ROX-101419
Date Collected: 10/14/19 09:30
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-3 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 10:54	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: 462744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-2	TB-ROX-101419-8260	Total/NA	Water	8260B	
400-178011-3	MW10-ROX-101419	Total/NA	Water	8260B	
400-178011-4	MW9-ROX-101419	Total/NA	Water	8260B	
400-178011-5	MW3-ROX-101419	Total/NA	Water	8260B	
400-178011-7	ROST3MW-ROX-101419	Total/NA	Water	8260B	
MB 400-462744/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462744/1002	Lab Control Sample	Total/NA	Water	8260B	
400-178011-3 MS	MW10-ROX-101419	Total/NA	Water	8260B	
400-178011-3 MSD	MW10-ROX-101419	Total/NA	Water	8260B	

Analysis Batch: 462942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-2	TB-ROX-101419-8260-SS	Total/NA	Water	8260B	
400-178013-3	P93C-ROX-101419	Total/NA	Water	8260B	
400-178013-4	P74-ROX-101419	Total/NA	Water	8260B	
MB 400-462942/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462942/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 462401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-3	MW10-ROX-101419	Total/NA	Water	3520C	
400-178011-4	MW9-ROX-101419	Total/NA	Water	3520C	
400-178011-5	MW3-ROX-101419	Total/NA	Water	3520C	
400-178011-7	ROST3MW-ROX-101419	Total/NA	Water	3520C	
400-178013-3	P93C-ROX-101419	Total/NA	Water	3520C	
400-178013-4	P74-ROX-101419	Total/NA	Water	3520C	
MB 400-462401/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-3	MW10-ROX-101419	Total/NA	Water	8270D LL	462401
400-178011-4	MW9-ROX-101419	Total/NA	Water	8270D LL	462401
400-178011-5	MW3-ROX-101419	Total/NA	Water	8270D LL	462401
400-178011-7	ROST3MW-ROX-101419	Total/NA	Water	8270D LL	462401
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D LL	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462401

Analysis Batch: 462867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-3	MW10-ROX-101419	Total/NA	Water	8270D	462401
400-178011-4	MW9-ROX-101419	Total/NA	Water	8270D	462401
400-178011-5	MW3-ROX-101419	Total/NA	Water	8270D	462401
400-178011-7	ROST3MW-ROX-101419	Total/NA	Water	8270D	462401
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D	462401

GC/MS Semi VOA (Continued)

Analysis Batch: 462867 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401

Analysis Batch: 463023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-3	P93C-ROX-101419	Total/NA	Water	8270D LL	462401

Analysis Batch: 463207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-3	P93C-ROX-101419	Total/NA	Water	8270D	462401
400-178013-4	P74-ROX-101419	Total/NA	Water	8270D	462401

Analysis Batch: 463641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-4	P74-ROX-101419	Total/NA	Water	8270D LL	462401

GC Semi VOA

Prep Batch: 462432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-1	TB-ROX-101419-8011	Total/NA	Water	8011	
400-178011-3	MW10-ROX-101419	Total/NA	Water	8011	
400-178011-4	MW9-ROX-101419	Total/NA	Water	8011	
400-178011-5	MW3-ROX-101419	Total/NA	Water	8011	
400-178011-7	ROST3MW-ROX-101419	Total/NA	Water	8011	
MB 400-462432/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462432/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462432/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 462493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-462432/2-A	Lab Control Sample	Total/NA	Water	8011	462432
LCSD 400-462432/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462432

Analysis Batch: 462569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-1	TB-ROX-101419-8011	Total/NA	Water	8011	462432
400-178011-3	MW10-ROX-101419	Total/NA	Water	8011	462432
400-178011-4	MW9-ROX-101419	Total/NA	Water	8011	462432
400-178011-5	MW3-ROX-101419	Total/NA	Water	8011	462432
400-178011-7	ROST3MW-ROX-101419	Total/NA	Water	8011	462432

Analysis Batch: 462889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462432/1-A	Method Blank	Total/NA	Water	8011	462432

Prep Batch: 462993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-1	TB-ROX-101419-8011-SS	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-178011-1

GC Semi VOA (Continued)

Prep Batch: 462993 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-3	P93C-ROX-101419	Total/NA	Water	8011	
400-178013-4	P74-ROX-101419	Total/NA	Water	8011	
MB 400-462993/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462993/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462993/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 463064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178013-1	TB-ROX-101419-8011-SS	Total/NA	Water	8011	462993
400-178013-3	P93C-ROX-101419	Total/NA	Water	8011	462993
400-178013-4	P74-ROX-101419	Total/NA	Water	8011	462993
MB 400-462993/1-A	Method Blank	Total/NA	Water	8011	462993
LCS 400-462993/2-A	Lab Control Sample	Total/NA	Water	8011	462993
LCSD 400-462993/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462993

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

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/23/19 08:12	1
Acrolein	ND		20	10	ug/L			10/23/19 08:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:12	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:12	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:12	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:12	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:12	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:12	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:12	1

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

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:12	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:12	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:12	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 08:12*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*10/23/19 08:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 08:12*	*1*

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	193		ug/L		96	43 - 160
Acrolein	500	550		ug/L		110	38 - 160
Acrylonitrile	500	482		ug/L		96	64 - 142
Benzene	50.0	44.5		ug/L		89	70 - 130
Bromobenzene	50.0	44.3		ug/L		89	70 - 132
Bromochloromethane	50.0	43.9		ug/L		88	70 - 130
Bromodichloromethane	50.0	46.6		ug/L		93	67 - 133
Bromoform	50.0	51.8		ug/L		104	57 - 140
Bromomethane	50.0	51.6		ug/L		103	10 - 160
2-Butanone (MEK)	200	186		ug/L		93	61 - 145
Carbon disulfide	50.0	38.9		ug/L		78	61 - 137
Carbon tetrachloride	50.0	45.8		ug/L		92	61 - 137
Chlorobenzene	50.0	43.2		ug/L		86	70 - 130
Dibromochloromethane	50.0	38.5		ug/L		77	67 - 135
Chloroethane	50.0	50.0		ug/L		100	55 - 141

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

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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	45.3		ug/L		91	10 - 160
Chloroform	50.0	45.6		ug/L		91	69 - 130
1-Chlorohexane	50.0	44.3		ug/L		89	69 - 130
Chloromethane	50.0	38.5		ug/L		77	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	41.8		ug/L		84	69 - 132
1,2-Dichlorobenzene	50.0	42.1		ug/L		84	67 - 130
1,3-Dichlorobenzene	50.0	42.5		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
Dichlorodifluoromethane	50.0	30.3		ug/L		61	41 - 146
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	43.6		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	44.6		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	42.3		ug/L		85	70 - 130
2,2-Dichloropropane	50.0	45.0		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	45.7		ug/L		91	70 - 130
Ethylbenzene	50.0	42.9		ug/L		86	70 - 130
Ethyl methacrylate	50.0	41.5		ug/L		83	68 - 130
Hexachlorobutadiene	50.0	45.6		ug/L		91	53 - 140
2-Hexanone	200	193		ug/L		97	65 - 137
Isopropylbenzene	50.0	38.8		ug/L		78	70 - 130
Methylene bromide	50.0	45.4		ug/L		91	70 - 130
Methylene Chloride	50.0	41.6		ug/L		83	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	40.6		ug/L		81	66 - 130
m-Xylene & p-Xylene	50.0	43.0		ug/L		86	70 - 130
Naphthalene	50.0	29.8		ug/L		60	47 - 149
n-Butylbenzene	50.0	39.2		ug/L		78	67 - 130
N-Propylbenzene	50.0	41.9		ug/L		84	70 - 130
o-Chlorotoluene	50.0	45.5		ug/L		91	70 - 130
o-Xylene	50.0	41.8		ug/L		84	70 - 130
p-Chlorotoluene	50.0	41.8		ug/L		84	70 - 130
p-Isopropyltoluene	50.0	39.6		ug/L		79	65 - 130
sec-Butylbenzene	50.0	40.9		ug/L		82	66 - 130
Styrene	50.0	42.2		ug/L		84	70 - 130
tert-Butylbenzene	50.0	40.2		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	37.6		ug/L		75	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 131
Tetrachloroethene	50.0	39.7		ug/L		79	65 - 130
Toluene	50.0	43.4		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	45.2		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	39.6		ug/L		79	63 - 130
1,2,3-Trichlorobenzene	50.0	34.8		ug/L		70	60 - 138
1,2,4-Trichlorobenzene	50.0	37.8		ug/L		76	60 - 140
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	70 - 130
Trichloroethene	50.0	42.2		ug/L		84	70 - 130
Trichlorofluoromethane	50.0	51.3		ug/L		103	65 - 138

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

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.2		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	41.5		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	50.0	40.3		ug/L		81	69 - 130
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	46.2		ug/L		92	59 - 136
Xylenes, Total	100	84.8		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*78 - 118*
Dibromofluoromethane	*110*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 400-178011-3 MS
Matrix: Water
Analysis Batch: 462744

Client Sample ID: MW10-ROX-101419
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F1	200	76.7	F1	ug/L		38	43 - 150
Acrolein	ND		500	595		ug/L		119	38 - 150
Acrylonitrile	ND		500	533		ug/L		107	62 - 149
Benzene	0.46	J	50.0	52.2		ug/L		103	56 - 142
Bromobenzene	ND		50.0	51.0		ug/L		102	59 - 136
Bromochloromethane	ND		50.0	50.3		ug/L		101	64 - 140
Bromodichloromethane	ND		50.0	52.5		ug/L		105	59 - 143
Bromoform	ND		50.0	59.0		ug/L		118	50 - 140
Bromomethane	ND		50.0	57.9		ug/L		116	10 - 150
2-Butanone (MEK)	ND		200	117		ug/L		58	55 - 150
Carbon disulfide	ND		50.0	44.7		ug/L		89	48 - 150
Carbon tetrachloride	ND		50.0	52.8		ug/L		106	55 - 145
Chlorobenzene	ND		50.0	49.5		ug/L		99	64 - 130
Dibromochloromethane	ND		50.0	43.8		ug/L		88	56 - 143
Chloroethane	ND		50.0	60.1		ug/L		120	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	5.19		ug/L		10	10 - 150
Chloroform	ND		50.0	51.2		ug/L		102	60 - 141
1-Chlorohexane	ND		50.0	50.7		ug/L		101	56 - 136
Chloromethane	ND		50.0	43.8		ug/L		88	49 - 148
cis-1,2-Dichloroethene	ND		50.0	53.3		ug/L		107	59 - 143
cis-1,3-Dichloropropene	ND		50.0	48.9		ug/L		98	57 - 140
1,2-Dichlorobenzene	ND		50.0	46.8		ug/L		94	52 - 137
1,3-Dichlorobenzene	ND		50.0	47.8		ug/L		96	54 - 135
1,4-Dichlorobenzene	ND		50.0	48.1		ug/L		96	53 - 135
Dichlorodifluoromethane	ND		50.0	33.0		ug/L		66	16 - 150
1,1-Dichloroethane	ND		50.0	55.2		ug/L		110	61 - 144
1,2-Dichloroethane	ND		50.0	49.8		ug/L		100	60 - 141
1,1-Dichloroethene	ND		50.0	52.9		ug/L		106	54 - 147
1,2-Dichloropropane	ND		50.0	54.7		ug/L		109	66 - 137
1,3-Dichloropropane	ND		50.0	47.9		ug/L		96	66 - 133
2,2-Dichloropropane	ND		50.0	52.4		ug/L		105	42 - 144

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

Lab Sample ID: 400-178011-3 MS
Matrix: Water
Analysis Batch: 462744

Client Sample ID: MW10-ROX-101419
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	53.9		ug/L		108	65 - 136
Ethylbenzene	ND		50.0	51.9		ug/L		104	58 - 131
Ethyl methacrylate	ND		50.0	51.2		ug/L		102	64 - 130
Hexachlorobutadiene	ND		50.0	52.0		ug/L		104	31 - 149
2-Hexanone	ND		200	138		ug/L		69	65 - 140
Isopropylbenzene	ND		50.0	46.0		ug/L		92	56 - 133
Methylene bromide	ND		50.0	51.7		ug/L		103	63 - 138
Methylene Chloride	ND		50.0	46.7		ug/L		93	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	211		ug/L		105	63 - 146
Methyl tert-butyl ether	ND		50.0	47.5		ug/L		95	59 - 137
m-Xylene & p-Xylene	ND		50.0	51.9		ug/L		104	57 - 130
Naphthalene	ND		50.0	40.5		ug/L		81	25 - 150
n-Butylbenzene	ND		50.0	45.1		ug/L		90	41 - 142
N-Propylbenzene	ND		50.0	50.4		ug/L		101	51 - 138
o-Chlorotoluene	ND		50.0	55.0		ug/L		110	53 - 134
o-Xylene	ND		50.0	50.0		ug/L		100	61 - 130
p-Chlorotoluene	ND		50.0	49.2		ug/L		98	54 - 133
p-Isopropyltoluene	ND		50.0	48.0		ug/L		96	48 - 139
sec-Butylbenzene	ND		50.0	49.6		ug/L		99	50 - 138
Styrene	ND		50.0	49.1		ug/L		98	58 - 131
tert-Butylbenzene	ND		50.0	47.9		ug/L		96	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.0		ug/L		90	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	52.1		ug/L		104	66 - 135
Tetrachloroethene	ND		50.0	44.3		ug/L		89	52 - 133
Toluene	ND		50.0	49.7		ug/L		99	65 - 130
trans-1,2-Dichloroethene	ND		50.0	52.3		ug/L		105	61 - 143
trans-1,3-Dichloropropene	ND		50.0	46.0		ug/L		92	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	42.0		ug/L		84	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	45.4		ug/L		91	39 - 148
1,1,1-Trichloroethane	ND		50.0	52.9		ug/L		106	57 - 142
1,1,2-Trichloroethane	ND		50.0	48.4		ug/L		97	66 - 131
Trichloroethene	ND		50.0	48.9		ug/L		98	64 - 136
Trichlorofluoromethane	ND		50.0	55.1		ug/L		110	54 - 150
1,2,3-Trichloropropane	ND		50.0	48.3		ug/L		97	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	49.0		ug/L		98	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	48.4		ug/L		97	52 - 135
Vinyl acetate	ND		100	120		ug/L		120	26 - 150
Vinyl chloride	ND		50.0	56.2		ug/L		112	46 - 150
Xylenes, Total	ND		100	102		ug/L		102	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

QC Sample Results

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

Job ID: 400-178011-1

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

Lab Sample ID: 400-178011-3 MSD
Matrix: Water
Analysis Batch: 462744

Client Sample ID: MW10-ROX-101419
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F1	200	72.9	F1	ug/L		36	43 - 150	5	30
Acrolein	ND		500	580		ug/L		116	38 - 150	3	31
Acrylonitrile	ND		500	512		ug/L		102	62 - 149	4	30
Benzene	0.46	J	50.0	49.2		ug/L		97	56 - 142	6	30
Bromobenzene	ND		50.0	46.4		ug/L		93	59 - 136	9	30
Bromochloromethane	ND		50.0	47.5		ug/L		95	64 - 140	6	30
Bromodichloromethane	ND		50.0	51.1		ug/L		102	59 - 143	3	30
Bromoform	ND		50.0	54.3		ug/L		109	50 - 140	8	30
Bromomethane	ND		50.0	57.6		ug/L		115	10 - 150	1	50
2-Butanone (MEK)	ND		200	111		ug/L		56	55 - 150	4	30
Carbon disulfide	ND		50.0	42.0		ug/L		84	48 - 150	6	30
Carbon tetrachloride	ND		50.0	50.0		ug/L		100	55 - 145	6	30
Chlorobenzene	ND		50.0	47.2		ug/L		94	64 - 130	5	30
Dibromochloromethane	ND		50.0	42.7		ug/L		85	56 - 143	3	30
Chloroethane	ND		50.0	55.2		ug/L		110	50 - 150	8	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	50.3		ug/L		101	60 - 141	2	30
1-Chlorohexane	ND		50.0	45.0		ug/L		90	56 - 136	12	30
Chloromethane	ND		50.0	43.6		ug/L		87	49 - 148	0	31
cis-1,2-Dichloroethene	ND		50.0	51.7		ug/L		103	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	47.4		ug/L		95	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	44.1		ug/L		88	52 - 137	6	30
1,3-Dichlorobenzene	ND		50.0	43.5		ug/L		87	54 - 135	9	30
1,4-Dichlorobenzene	ND		50.0	43.7		ug/L		87	53 - 135	10	30
Dichlorodifluoromethane	ND		50.0	31.3		ug/L		63	16 - 150	5	31
1,1-Dichloroethane	ND		50.0	52.7		ug/L		105	61 - 144	5	30
1,2-Dichloroethane	ND		50.0	48.7		ug/L		97	60 - 141	2	30
1,1-Dichloroethene	ND		50.0	48.0		ug/L		96	54 - 147	10	30
1,2-Dichloropropane	ND		50.0	53.3		ug/L		107	66 - 137	3	30
1,3-Dichloropropane	ND		50.0	46.2		ug/L		92	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	51.0		ug/L		102	42 - 144	3	31
1,1-Dichloropropene	ND		50.0	50.9		ug/L		102	65 - 136	6	30
Ethylbenzene	ND		50.0	47.7		ug/L		95	58 - 131	9	30
Ethyl methacrylate	ND		50.0	49.8		ug/L		100	64 - 130	3	30
Hexachlorobutadiene	ND		50.0	46.0		ug/L		92	31 - 149	12	36
2-Hexanone	ND		200	133		ug/L		66	65 - 140	4	30
Isopropylbenzene	ND		50.0	41.1		ug/L		82	56 - 133	11	30
Methylene bromide	ND		50.0	50.0		ug/L		100	63 - 138	3	30
Methylene Chloride	ND		50.0	46.4		ug/L		93	60 - 146	1	32
4-Methyl-2-pentanone (MIBK)	ND		200	205		ug/L		103	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	47.2		ug/L		94	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	47.8		ug/L		96	57 - 130	8	30
Naphthalene	ND		50.0	36.2		ug/L		72	25 - 150	11	30
n-Butylbenzene	ND		50.0	38.4		ug/L		77	41 - 142	16	31
N-Propylbenzene	ND		50.0	43.5		ug/L		87	51 - 138	15	30
o-Chlorotoluene	ND		50.0	47.4		ug/L		95	53 - 134	15	30
o-Xylene	ND		50.0	46.4		ug/L		93	61 - 130	7	30
p-Chlorotoluene	ND		50.0	44.3		ug/L		89	54 - 133	11	30

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

Lab Sample ID: 400-178011-3 MSD
Matrix: Water
Analysis Batch: 462744

Client Sample ID: MW10-ROX-101419
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	41.0		ug/L		82	48 - 139	16	30
sec-Butylbenzene	ND		50.0	42.7		ug/L		85	50 - 138	15	30
Styrene	ND		50.0	46.7		ug/L		93	58 - 131	5	30
tert-Butylbenzene	ND		50.0	41.9		ug/L		84	54 - 146	14	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.0		ug/L		86	59 - 137	5	30
1,1,2,2-Tetrachloroethane	ND		50.0	49.1		ug/L		98	66 - 135	6	30
Tetrachloroethene	ND		50.0	40.1		ug/L		80	52 - 133	10	30
Toluene	ND		50.0	47.2		ug/L		94	65 - 130	5	30
trans-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	61 - 143	6	30
trans-1,3-Dichloropropene	ND		50.0	43.0		ug/L		86	53 - 133	7	30
1,2,3-Trichlorobenzene	ND		50.0	40.2		ug/L		80	43 - 145	4	30
1,2,4-Trichlorobenzene	ND		50.0	42.6		ug/L		85	39 - 148	6	30
1,1,1-Trichloroethane	ND		50.0	49.9		ug/L		100	57 - 142	6	30
1,1,2-Trichloroethane	ND		50.0	46.6		ug/L		93	66 - 131	4	30
Trichloroethene	ND		50.0	44.7		ug/L		89	64 - 136	9	30
Trichlorofluoromethane	ND		50.0	55.4		ug/L		111	54 - 150	0	30
1,2,3-Trichloropropane	ND		50.0	45.9		ug/L		92	65 - 133	5	30
1,2,4-Trimethylbenzene	ND		50.0	42.4		ug/L		85	50 - 139	14	30
1,3,5-Trimethylbenzene	ND		50.0	42.6		ug/L		85	52 - 135	13	30
Vinyl acetate	ND		100	123		ug/L		123	26 - 150	2	33
Vinyl chloride	ND		50.0	54.2		ug/L		108	46 - 150	4	30
Xylenes, Total	ND		100	94.2		ug/L		94	59 - 130	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*107*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 400-462942/4
Matrix: Water
Analysis Batch: 462942

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/24/19 12:09	1
Acrolein	ND		20	10	ug/L			10/24/19 12:09	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 12:09	1
Benzene	ND		1.0	0.38	ug/L			10/24/19 12:09	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 12:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 12:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 12:09	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 12:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/19 12:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 12:09	1

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

Lab Sample ID: MB 400-462942/4
Matrix: Water
Analysis Batch: 462942

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			10/24/19 12:09	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 12:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 12:09	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 12:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 12:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 12:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 12:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 12:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 12:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 12:09	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 12:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/19 12:09	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 12:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 12:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 12:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/24/19 12:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/24/19 12:09	1
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 12:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 12:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/19 12:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 12:09	1
o-Xylene	ND		5.0	0.60	ug/L			10/24/19 12:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 12:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/19 12:09	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/24/19 12:09	1
Styrene	ND		1.0	1.0	ug/L			10/24/19 12:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/19 12:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 12:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 12:09	1
Toluene	ND		1.0	0.41	ug/L			10/24/19 12:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 12:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 12:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 12:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 12:09	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 12:09	1

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

Lab Sample ID: MB 400-462942/4
Matrix: Water
Analysis Batch: 462942

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			10/24/19 12:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/19 12:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/19 12:09	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 12:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Xylenes, Total	ND		10	1.6	ug/L			10/24/19 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*10/24/19 12:09*	*1*
Dibromofluoromethane	*110*		*81 - 121*		*10/24/19 12:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/24/19 12:09*	*1*

Lab Sample ID: LCS 400-462942/1002
Matrix: Water
Analysis Batch: 462942

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	241		ug/L		121	43 - 160
Acrolein	500	668		ug/L		134	38 - 160
Acrylonitrile	500	601		ug/L		120	64 - 142
Benzene	50.0	53.7		ug/L		107	70 - 130
Bromobenzene	50.0	52.2		ug/L		104	70 - 132
Bromochloromethane	50.0	52.5		ug/L		105	70 - 130
Bromodichloromethane	50.0	56.6		ug/L		113	67 - 133
Bromoform	50.0	64.1		ug/L		128	57 - 140
Bromomethane	50.0	62.9		ug/L		126	10 - 160
2-Butanone (MEK)	200	233		ug/L		117	61 - 145
Carbon disulfide	50.0	47.5		ug/L		95	61 - 137
Carbon tetrachloride	50.0	55.0		ug/L		110	61 - 137
Chlorobenzene	50.0	52.6		ug/L		105	70 - 130
Dibromochloromethane	50.0	48.6		ug/L		97	67 - 135
Chloroethane	50.0	54.1		ug/L		108	55 - 141
2-Chloroethyl vinyl ether	50.0	56.3		ug/L		113	10 - 160
Chloroform	50.0	52.8		ug/L		106	69 - 130
1-Chlorohexane	50.0	52.6		ug/L		105	69 - 130
Chloromethane	50.0	42.4		ug/L		85	58 - 137
cis-1,2-Dichloroethene	50.0	55.0		ug/L		110	68 - 130
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	69 - 132
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	33.9		ug/L		68	41 - 146
1,1-Dichloroethane	50.0	55.6		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	52.4		ug/L		105	69 - 130
1,1-Dichloroethene	50.0	52.3		ug/L		105	63 - 134
1,2-Dichloropropane	50.0	55.4		ug/L		111	70 - 130
1,3-Dichloropropane	50.0	51.9		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	53.9		ug/L		108	52 - 135

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

Lab Sample ID: LCS 400-462942/1002
Matrix: Water
Analysis Batch: 462942

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	54.2		ug/L		108	70 - 130
Ethylbenzene	50.0	52.6		ug/L		105	70 - 130
Ethyl methacrylate	50.0	55.0		ug/L		110	68 - 130
Hexachlorobutadiene	50.0	58.3		ug/L		117	53 - 140
2-Hexanone	200	248		ug/L		124	65 - 137
Isopropylbenzene	50.0	47.6		ug/L		95	70 - 130
Methylene bromide	50.0	57.7		ug/L		115	70 - 130
Methylene Chloride	50.0	50.6		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	253		ug/L		126	69 - 138
Methyl tert-butyl ether	50.0	49.3		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	53.0		ug/L		106	70 - 130
Naphthalene	50.0	40.3		ug/L		81	47 - 149
n-Butylbenzene	50.0	47.3		ug/L		95	67 - 130
N-Propylbenzene	50.0	50.2		ug/L		100	70 - 130
o-Chlorotoluene	50.0	54.8		ug/L		110	70 - 130
o-Xylene	50.0	52.1		ug/L		104	70 - 130
p-Chlorotoluene	50.0	50.5		ug/L		101	70 - 130
p-Isopropyltoluene	50.0	48.1		ug/L		96	65 - 130
sec-Butylbenzene	50.0	49.2		ug/L		98	66 - 130
Styrene	50.0	52.8		ug/L		106	70 - 130
tert-Butylbenzene	50.0	47.3		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.2		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	70 - 131
Tetrachloroethene	50.0	47.6		ug/L		95	65 - 130
Toluene	50.0	51.6		ug/L		103	70 - 130
trans-1,2-Dichloroethene	50.0	54.8		ug/L		110	70 - 130
trans-1,3-Dichloropropene	50.0	48.1		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	45.3		ug/L		91	60 - 138
1,2,4-Trichlorobenzene	50.0	48.8		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	55.0		ug/L		110	68 - 130
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	70 - 130
Trichloroethene	50.0	50.4		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	59.9		ug/L		120	65 - 138
1,2,3-Trichloropropane	50.0	54.1		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	50.0	48.6		ug/L		97	69 - 130
Vinyl acetate	100	130		ug/L		130	26 - 160
Vinyl chloride	50.0	54.8		ug/L		110	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*107*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzenethiol	ND		10	1.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzoic acid	ND		30	7.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzyl alcohol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/21/19 10:59	10/23/19 21:01	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/21/19 10:59	10/23/19 21:01	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloroaniline	ND		10	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chlorophenol	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenzofuran	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Diethyl phthalate	ND		10	0.70	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/21/19 10:59	10/23/19 21:01	1
1,4-Dioxane	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachloroethane	ND		10	4.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Indene	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Isophorone	ND		10	0.57	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Methylphenol	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitroaniline	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
3-Nitroaniline	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitroaniline	ND		10	2.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Nitrobenzene	ND		10	0.55	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitrophenol	ND		10	0.65	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitrophenol	ND		10	2.1	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pentachlorophenol	ND		20	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Phenol	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	3.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Quinoline	ND		10	6.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2-Fluorophenol	*33*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Phenol-d5	*56*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Terphenyl-d14	*80*		*53 - 125*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*10/21/19 10:59*	*10/23/19 21:01*	*1*

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	10.7		ug/L		36	29 - 120
Benzoic acid	117	69.5		ug/L		60	10 - 150
Benzyl alcohol	30.0	9.76	J	ug/L		33	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.0		ug/L		70	45 - 120
Bis(2-chloroethyl)ether	30.0	32.3		ug/L		108	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.6		ug/L		69	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	19.2		ug/L		64	48 - 150
4-Bromophenyl phenyl ether	30.0	17.3		ug/L		58	55 - 122
Butyl benzyl phthalate	30.0	19.4		ug/L		65	46 - 145
4-Chloroaniline	30.0	19.1		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	20.8		ug/L		69	39 - 140
2-Chloronaphthalene	30.0	17.7		ug/L		59	52 - 120
2-Chlorophenol	30.0	11.8		ug/L		39	34 - 120
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124
Dibenz[a,h]acridine	30.0	17.2		ug/L		57	46 - 149
Dibenzofuran	30.0	19.3		ug/L		64	58 - 123
3,3'-Dichlorobenzidine	40.0	30.7		ug/L		77	39 - 135
2,4-Dichlorophenol	30.0	16.9		ug/L		56	39 - 128
Diethyl phthalate	30.0	22.6		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	20.0		ug/L		67	44 - 120
Dimethyl phthalate	30.0	20.7		ug/L		69	50 - 131
Di-n-butyl phthalate	30.0	19.5		ug/L		65	55 - 131
4,6-Dinitro-ortho-cresol	60.0	42.7		ug/L		71	10 - 150
2,4-Dinitrophenol	60.0	48.4		ug/L		81	10 - 150
2,4-Dinitrotoluene	30.0	22.9		ug/L		76	58 - 140
2,6-Dinitrotoluene	30.0	21.0		ug/L		70	57 - 130
Di-n-octyl phthalate	30.0	19.6		ug/L		65	50 - 150
1,4-Dioxane	30.0	12.3		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	19.7		ug/L		66	47 - 123
Hexachlorobenzene	30.0	17.9		ug/L		60	52 - 131

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

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	30.0	8.44	J	ug/L		28	10 - 129
Hexachloroethane	30.0	15.7		ug/L		52	41 - 120
Indene	30.0	18.3		ug/L		61	47 - 120
Isophorone	30.0	20.8		ug/L		69	49 - 120
2-Methylphenol	30.0	21.4		ug/L		71	39 - 123
3 & 4 Methylphenol	30.0	17.3	J	ug/L		58	38 - 121
2-Nitroaniline	30.0	22.4		ug/L		75	47 - 150
3-Nitroaniline	30.0	20.0		ug/L		67	34 - 132
4-Nitroaniline	30.0	23.5		ug/L		78	41 - 135
Nitrobenzene	30.0	20.8		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136
4-Nitrophenol	60.0	41.4		ug/L		69	10 - 150
N-Nitrosodimethylamine	30.0	22.1		ug/L		74	22 - 148
N-Nitrosodi-n-propylamine	30.0	23.5		ug/L		78	44 - 120
N-Nitrosodiphenylamine	29.8	19.3		ug/L		65	56 - 120
Pentachlorophenol	60.0	34.6		ug/L		58	15 - 141
Phenol	30.0	11.5		ug/L		38	33 - 120
Pyridine	60.0	34.3		ug/L		57	26 - 120
Quinoline	30.0	19.9		ug/L		66	51 - 129
2,4,5-Trichlorophenol	30.0	19.0		ug/L		63	38 - 147
2,4,6-Trichlorophenol	30.0	16.9		ug/L		56	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*16*		*10 - 120*
Nitrobenzene-d5	*69*		*27 - 120*
Phenol-d5	*38*		*10 - 120*
Terphenyl-d14	*68*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

Lab Sample ID: LCS 400-462401/4-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

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	*81*		*34 - 120*
2-Fluorophenol	*22*		*10 - 120*
Nitrobenzene-d5	*71*		*27 - 120*
Phenol-d5	*41*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*64*		*15 - 135*

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

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	14.4		ug/L		48	29 - 120	29	30
Benzoic acid	117	89.2		ug/L		77	10 - 150	25	30
Benzyl alcohol	30.0	10.9		ug/L		36	19 - 125	11	30
Bis(2-chloroethoxy)methane	30.0	23.1		ug/L		77	45 - 120	10	30
Bis(2-chloroethyl)ether	30.0	33.8		ug/L		113	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	23.5		ug/L		78	30 - 125	13	30
Bis(2-ethylhexyl) phthalate	30.0	22.3		ug/L		74	48 - 150	15	30
4-Bromophenyl phenyl ether	30.0	20.3		ug/L		68	55 - 122	16	30
Butyl benzyl phthalate	30.0	22.4		ug/L		75	46 - 145	14	30
4-Chloroaniline	30.0	16.0		ug/L		53	30 - 120	18	30
4-Chloro-3-methylphenol	30.0	24.0		ug/L		80	39 - 140	14	30
2-Chloronaphthalene	30.0	22.1		ug/L		74	52 - 120	22	30
2-Chlorophenol	30.0	20.3	*	ug/L		68	34 - 120	53	30
4-Chlorophenyl phenyl ether	30.0	21.3		ug/L		71	58 - 124	17	30
Dibenz[a,h]acridine	30.0	21.3		ug/L		71	46 - 149	21	30
Dibenzofuran	30.0	22.9		ug/L		76	58 - 123	17	30
3,3'-Dichlorobenzidine	40.0	35.4		ug/L		88	39 - 135	14	30
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128	30	30
Diethyl phthalate	30.0	25.9		ug/L		86	44 - 146	14	30
2,4-Dimethylphenol	30.0	23.7		ug/L		79	44 - 120	17	30
Dimethyl phthalate	30.0	23.7		ug/L		79	50 - 131	13	30
Di-n-butyl phthalate	30.0	22.7		ug/L		76	55 - 131	15	30
4,6-Dinitro-ortho-cresol	60.0	50.9		ug/L		85	10 - 150	18	30
2,4-Dinitrophenol	60.0	55.5		ug/L		92	10 - 150	14	30
2,4-Dinitrotoluene	30.0	25.8		ug/L		86	58 - 140	12	30
2,6-Dinitrotoluene	30.0	24.3		ug/L		81	57 - 130	15	30
Di-n-octyl phthalate	30.0	23.4		ug/L		78	50 - 150	18	30
1,4-Dioxane	30.0	14.7		ug/L		49	25 - 120	18	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.2		ug/L		77	47 - 123	16	30
Hexachlorobenzene	30.0	21.1		ug/L		70	52 - 131	16	30
Hexachlorocyclopentadiene	30.0	11.7	J *	ug/L		39	10 - 129	33	30
Hexachloroethane	30.0	20.1		ug/L		67	41 - 120	25	30
Indene	30.0	23.1		ug/L		77	47 - 120	23	30
Isophorone	30.0	23.0		ug/L		77	49 - 120	10	30
2-Methylphenol	30.0	28.7		ug/L		96	39 - 123	29	30
3 & 4 Methylphenol	30.0	23.7	*	ug/L		79	38 - 121	32	30
2-Nitroaniline	30.0	25.8		ug/L		86	47 - 150	14	30
3-Nitroaniline	30.0	22.4		ug/L		75	34 - 132	11	30
4-Nitroaniline	30.0	26.5		ug/L		88	41 - 135	12	30
Nitrobenzene	30.0	23.2		ug/L		77	47 - 120	11	30
2-Nitrophenol	30.0	23.9		ug/L		80	28 - 136	27	30
4-Nitrophenol	60.0	45.5		ug/L		76	10 - 150	9	30
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148	14	30
N-Nitrosodi-n-propylamine	30.0	26.7		ug/L		89	44 - 120	13	30
N-Nitrosodiphenylamine	29.8	22.3		ug/L		75	56 - 120	15	30
Pentachlorophenol	60.0	41.8		ug/L		70	15 - 141	19	30
Phenol	30.0	22.2	*	ug/L		74	33 - 120	64	30
Pyridine	60.0	41.0		ug/L		68	26 - 120	18	30

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

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Quinoline	30.0	22.8		ug/L		76	51 - 129	13	30
2,4,5-Trichlorophenol	30.0	22.8		ug/L		76	38 - 147	18	30
2,4,6-Trichlorophenol	30.0	22.4		ug/L		75	36 - 139	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*62*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*70*		*15 - 135*

Lab Sample ID: LCSD 400-462401/5-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	90	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*15*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*34*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*
2,4,6-Tribromophenol	*72*		*15 - 135*

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Anthracene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Chrysene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluoranthene	0.0233	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluorene	ND		0.20	0.021	ug/L		10/21/19 10:59	10/23/19 09:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Phenanthrene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.0235	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*71*		*33 - 138*	*10/21/19 10:59*	*10/23/19 09:56*	*1*
2-Fluorobiphenyl	*69*		*15 - 122*	*10/21/19 10:59*	*10/23/19 09:56*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*10/21/19 10:59*	*10/23/19 09:56*	*1*

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.6		ug/L		85	41 - 120
Acenaphthylene	30.0	27.9		ug/L		93	44 - 120
Anthracene	30.0	24.4		ug/L		81	49 - 120
Benzo[a]anthracene	30.0	23.8		ug/L		79	61 - 135
Benzo[a]pyrene	30.0	25.6		ug/L		85	52 - 120
Benzo[b]fluoranthene	30.0	26.7		ug/L		89	53 - 134
Benzo[g,h,i]perylene	30.0	20.3		ug/L		68	47 - 133
Benzo[k]fluoranthene	30.0	27.0		ug/L		90	57 - 134
Chrysene	30.0	22.8		ug/L		76	55 - 122
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146
Fluoranthene	30.0	24.4		ug/L		81	54 - 128
Fluorene	30.0	26.4		ug/L		88	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.1		ug/L		74	43 - 142
Phenanthrene	30.0	23.6		ug/L		79	48 - 120
Pyrene	30.0	24.9		ug/L		83	48 - 132
1-Methylnaphthalene	30.0	20.8		ug/L		69	41 - 120
2-Methylnaphthalene	30.0	20.3		ug/L		68	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*80*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*60*		*19 - 130*

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.2		ug/L		91	41 - 120	6	56
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120	5	56
Anthracene	30.0	25.5		ug/L		85	49 - 120	5	51
Benzo[a]anthracene	30.0	23.1		ug/L		77	61 - 135	3	49
Benzo[a]pyrene	30.0	25.4		ug/L		85	52 - 120	1	50
Benzo[b]fluoranthene	30.0	26.0		ug/L		87	53 - 134	3	54

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

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	30.0	20.5		ug/L		68	47 - 133	1	50
Benzo[k]fluoranthene	30.0	27.3		ug/L		91	57 - 134	1	52
Chrysene	30.0	22.4		ug/L		75	55 - 122	2	50
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146	0	50
Fluoranthene	30.0	24.8		ug/L		83	54 - 128	2	52
Fluorene	30.0	26.8		ug/L		89	45 - 125	2	56
Indeno[1,2,3-cd]pyrene	30.0	22.3		ug/L		74	43 - 142	1	51
Phenanthrene	30.0	24.0		ug/L		80	48 - 120	1	56
Pyrene	30.0	24.1		ug/L		80	48 - 132	3	52
1-Methylnaphthalene	30.0	23.2		ug/L		77	41 - 120	11	55
2-Methylnaphthalene	30.0	22.5		ug/L		75	32 - 124	10	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*75*		*33 - 138*
2-Fluorobiphenyl	*82*		*15 - 122*
Nitrobenzene-d5	*57*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462432/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462432

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		10/21/19 13:44	10/24/19 08:28	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/21/19 13:44	10/24/19 08:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*10/21/19 13:44*	*10/24/19 08:28*	*1*

Lab Sample ID: LCS 400-462432/2-A
Matrix: Water
Analysis Batch: 462493

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.0820		ug/L		82	60 - 140
1,2-Dibromoethane	0.100	0.102		ug/L		102	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*130*		*51 - 149*

Lab Sample ID: LCSD 400-462432/3-A
Matrix: Water
Analysis Batch: 462493

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462432

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.0798		ug/L		80	60 - 140	3	30
1,2-Dibromoethane	0.100	0.103		ug/L		103	60 - 140	0	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-462432/3-A
Matrix: Water
Analysis Batch: 462493

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462432

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	128		51 - 149

Lab Sample ID: MB 400-462993/1-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462993

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		10/24/19 11:09	10/25/19 02:35	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/24/19 11:09	10/25/19 02:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	74		51 - 149	10/24/19 11:09	10/25/19 02:35	1

Lab Sample ID: LCS 400-462993/2-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462993

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	0.107		ug/L		107	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	80		51 - 149

Lab Sample ID: LCSD 400-462993/3-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462993

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.0939		ug/L		94	60 - 140	5	30
1,2-Dibromoethane	0.100	0.112		ug/L		112	60 - 140	4	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	82		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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/14/19
PAGE: 1 of 2

SAMPLING COMPANY: AECOM	LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	
PROJECT CONTACT (Hardcopy or PDF Report to): 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 - 1.03.004 / 60592794 - 1.03.0044
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
SAMPLER NAME(S) (Print): B Howell B. Burleson		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 - 1.03.004: VOC 8260; SVOC 8270

UNIT COST 60592794 - 1.03.0044: VOC 8011; PAH 8270LL

400-178011 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-101419-8011	10/14/19	0000	Water	X					2			2	
	TB-ROX-101419-8260		0000		X					2	2			
	MW10-ROX-101419		0930		X			X		6	2	1	2	1
	MW9-ROX-101419		1015		X			X		6	2	1	2	1
	MW3-ROX-101419		1110		X			X		6	2	1	2	1
	ROST4PZC-ROX-101419		1220		X			X		6	2	1	2	1
	ROST3MW-ROX-101419		1310		X			X		6	2	1	2	1

Relinquished by: (Signature) B Howell	Received by: (Signature) Fedex: 1194 6302 0134, 1194 6302 0123, 1194 6302 0112, 1194 6302 0101	Date: 10/14/19	Time: 1600
Relinquished by: (Signature)	Received by: (Signature) N Madaway	Date: 10-15-19	Time: 847
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 14Dec15

Custody seal #'s: 1090685 1090689 1090687 / 1090689 1090689 1090691

3.9°C, 1.3°C, 2.7°C, 4.6°C, IR7

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11/1/2019

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
PlaNet Site or Project ID: 25278
PO. #: 60592794 - 1.03.004 | 60592794 - 1.03.0044
GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/14/19
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 - 1.03.004 | 60592794 - 1.03.0044

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
COC DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AFCUM Client ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): T. Jones M. D'Angelo, B. Howell
LAB USE ONLY:

TELEPHONE: 314-429-0100
FAX: 314-429-0462
List 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

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	NON-UNIT COST 60592794 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL
	TB-ROX-101419-EDB-SS	10/14/19	0000	Water	X					2			2	
	TB-ROX-101419-8260-SS	"	0000	"	X					2	2			
	P93C-ROX-101419		1255		X			X		6	2	1	2	1
	P74-ROX-101419		1405		X			X		6	2	1	2	1

400-178013 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	1194 6302 0134 1194 6307 0112	10/14/19	1600
	Fedex: 1194 6307 0123 1194 6307 0101		
	N Broadway	10-15-19	847

Version: 14Dec15

custody seal #'s: 10906684 10906688
10906685 10906689
10906686 10906690

3.9C, 1.3C, 2.7C, 4.6C IR7

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Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-178011-1

Login Number: 178011
List Number: 1
Creator: Gore, Beija K

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	1090684,1090685,1090691,1090690,1090687,1090686,1090688,1090689
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	3.9°C, 1.3 °C, 2.7 °C, 4.6 °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	

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-178011-1

Login Number: 178013
List Number: 1
Creator: Gore, Beija K

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	1090688,1090689,1090685,1090684,1090691,1090690,1090686,1090687
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	3.9°C,1.3°C,2.7°C, 4.6 °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: 400-178011-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-178011-2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/27/2019

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

Sample Identification
ROST4PZC-ROX-101419

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, laboratory case narrative indicated PAHs were detected in the method blank. The LCS/LCSD recovery for benzenethiol, and several SVOC LCS/LCSD RPDs were outside evaluation criteria. The continuing calibration verifications for several SVOCs 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 400-462401/1-A	PAHs	Fluoranthene	0.0233 µg/L
MB 400-462401/1-A	PAHs	Pyrene	0.0235 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
ROST4PZC-ROX-101419	PAHs	Fluoranthene	-	**U**
ROST4PZC-ROX-101419	PAHs	Pyrene	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-462401/4-A/5-A	SVOCs	Benzenethiol	**0.8/2**	**90**	10-120/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	2-Chlorophenol	39/68	**53**	34-120/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	28/39	**33**	10-129/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	3&4 Methylphenol	58/79	**32**	38-121/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Phenol	38/74	**64**	33-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
ROST4PZC-ROX-101419	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

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 verifications for several analytes were below acceptance criteria and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZC-ROX-101419	SVOCs	Benzoic acid	**UJ**
ROST4PZC-ROX-101419	SVOCs	Benzyl alcohol	**UJ**
ROST4PZC-ROX-101419	SVOCs	Indene	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-178011-2
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:
10/24/2019 10:32:31 AM

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

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Renewed 11/27/19 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: 400-178011-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-178011-2

Comments
Results for sample, ROST4PZC-ROX-101419 (400-178011-6), are reported separately.

Receipt
The samples were received on 10/15/2019 8:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.3° C, 2.7° C, 3.9° C and 4.6° C.

GC/MS VOA
Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-451121 was outside method criteria for the following analyte; Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: ROST4PZC-ROX-101419 (400-178011-6). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D LL: The method blank for preparation batch 400-462401 and analytical batch 400-462759 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 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: 2-Chlorophenol, 3 & 4 Methylphenol, Hexachlorocyclopentadiene and Phenol.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered above the upper control limit for 2-Methylphenol, Di-n-butyl phthalate and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered outside acceptance criteria, low biased, for Benzoic acid, Benzyl alcohol and Indene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: Benzenethiol.

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.

Job ID: 400-178011-2 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

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

Sample Summary

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

Job ID: 400-178011-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-178011-6	ROST4PZC-ROX-101419	Water	10/14/19 12:20	10/15/19 08:47	

Detection Summary

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

Job ID: 400-178011-2

Client Sample ID: ROST4PZC-ROX-101419

Lab Sample ID: 400-178011-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.7		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	14	J	25	2.6	ug/L	1		8260B	Total/NA
Carbon disulfide	0.51	J	1.0	0.50	ug/L	1		8260B	Total/NA
Ethylbenzene	38		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	8.9		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	65		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	64		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	18		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	4.1	J	5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.1		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.2		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	7.1		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	37		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	2.4		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	69		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	1.8		0.19	0.019	ug/L	1		8270D LL	Total/NA
Anthracene	0.46		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.066	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	1.3		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	3.7		0.19	0.019	ug/L	1		8270D LL	Total/NA
Pyrene	0.11	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	35		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	7.8		0.19	0.019	ug/L	1		8270D LL	Total/NA
Dibenzofuran	1.6	J	9.5	0.49	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZC-ROX-101419
Date Collected: 10/14/19 12:20
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-6
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			10/23/19 12:44	1
Acrolein	ND		20	10	ug/L			10/23/19 12:44	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 12:44	1
Benzene	**4.7**		1.0	0.38	ug/L			10/23/19 12:44	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 12:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 12:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 12:44	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 12:44	1
2-Butanone (MEK)	**14**	**J**	25	2.6	ug/L			10/23/19 12:44	1
Carbon disulfide	**0.51**	**J**	1.0	0.50	ug/L			10/23/19 12:44	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 12:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 12:44	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 12:44	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 12:44	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 12:44	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 12:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 12:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 12:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Ethylbenzene	**38**		1.0	0.50	ug/L			10/23/19 12:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 12:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 12:44	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 12:44	1
Isopropylbenzene	**8.9**		1.0	0.53	ug/L			10/23/19 12:44	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 12:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 12:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 12:44	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 12:44	1
m-Xylene & p-Xylene	**65**		5.0	1.6	ug/L			10/23/19 12:44	1
Naphthalene	**64**		1.0	1.0	ug/L			10/23/19 12:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 12:44	1
N-Propylbenzene	**18**		1.0	0.69	ug/L			10/23/19 12:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 12:44	1
o-Xylene	**4.1**	**J**	5.0	0.60	ug/L			10/23/19 12:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 12:44	1
p-Isopropyltoluene	**1.1**		1.0	0.71	ug/L			10/23/19 12:44	1

Client Sample ID: ROST4PZC-ROX-101419
Date Collected: 10/14/19 12:20
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**1.2**		1.0	0.70	ug/L			10/23/19 12:44	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 12:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 12:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 12:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 12:44	1
Toluene	**7.1**		1.0	0.41	ug/L			10/23/19 12:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 12:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 12:44	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:44	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 12:44	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 12:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 12:44	1
1,2,4-Trimethylbenzene	**37**		1.0	0.82	ug/L			10/23/19 12:44	1
1,3,5-Trimethylbenzene	**2.4**		1.0	0.56	ug/L			10/23/19 12:44	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 12:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 12:44	1
Xylenes, Total	**69**		10	1.6	ug/L			10/23/19 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*10/23/19 12:44*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*10/23/19 12:44*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/23/19 12:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.8**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
Anthracene	**0.46**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Fluoranthene	~~0.066~~	J B	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
Fluorene	**1.3**		0.19	0.020	ug/L		10/21/19 11:00	10/23/19 10:48	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 10:48	1
Phenanthrene	**3.7**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
Pyrene	~~0.11~~	J B	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
1-Methylnaphthalene	**35**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1
2-Methylnaphthalene	**7.8**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*70*		*33 - 138*	*10/21/19 11:00*	*10/23/19 10:48*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*10/21/19 11:00*	*10/23/19 10:48*	*1*

Client Sample ID: ROST4PZC-ROX-101419
Date Collected: 10/14/19 12:20
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		19 - 130	10/21/19 11:00	10/23/19 10:48	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		10/21/19 11:00	10/23/19 23:57	1
Benzenethiol	ND	*	9.5	1.6	ug/L		10/21/19 11:00	10/23/19 23:57	1
Benzoic acid	ND		29	6.9	ug/L		10/21/19 11:00	10/23/19 23:57	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:57	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:57	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/21/19 11:00	10/23/19 23:57	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 11:00	10/23/19 23:57	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/21/19 11:00	10/23/19 23:57	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/21/19 11:00	10/23/19 23:57	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:57	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/21/19 11:00	10/23/19 23:57	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 11:00	10/23/19 23:57	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/21/19 11:00	10/23/19 23:57	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 11:00	10/23/19 23:57	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:57	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/21/19 11:00	10/23/19 23:57	1
Dibenzofuran	**1.6**	**J**	9.5	0.49	ug/L		10/21/19 11:00	10/23/19 23:57	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 11:00	10/23/19 23:57	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:57	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 11:00	10/23/19 23:57	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 11:00	10/23/19 23:57	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/23/19 23:57	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 11:00	10/23/19 23:57	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:57	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 11:00	10/23/19 23:57	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/23/19 23:57	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 11:00	10/23/19 23:57	1
Indene	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:57	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 11:00	10/23/19 23:57	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 11:00	10/23/19 23:57	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/23/19 23:57	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 11:00	10/23/19 23:57	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 11:00	10/23/19 23:57	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 11:00	10/23/19 23:57	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 11:00	10/23/19 23:57	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 11:00	10/23/19 23:57	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 11:00	10/23/19 23:57	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:57	1

Client Sample ID: ROST4PZC-ROX-101419
Date Collected: 10/14/19 12:20
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/21/19 11:00	10/23/19 23:57	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 11:00	10/23/19 23:57	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/23/19 23:57	1
Phenol	ND	*	9.5	2.5	ug/L		10/21/19 11:00	10/23/19 23:57	1
Pyridine	ND		9.5	3.0	ug/L		10/21/19 11:00	10/23/19 23:57	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 11:00	10/23/19 23:57	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*34 - 120*	*10/21/19 11:00*	*10/23/19 23:57*	*1*
2-Fluorophenol	*38*		*10 - 120*	*10/21/19 11:00*	*10/23/19 23:57*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*10/21/19 11:00*	*10/23/19 23:57*	*1*
Phenol-d5	*52*		*10 - 120*	*10/21/19 11:00*	*10/23/19 23:57*	*1*
Terphenyl-d14	*79*		*53 - 125*	*10/21/19 11:00*	*10/23/19 23:57*	*1*
2,4,6-Tribromophenol	*77*		*15 - 135*	*10/21/19 11:00*	*10/23/19 23:57*	*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		10/21/19 13:44	10/22/19 14:19	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/21/19 13:44	10/22/19 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*	*p*	*51 - 149*	*10/21/19 13:44*	*10/22/19 14:19*	*1*

Definitions/Glossary

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

Job ID: 400-178011-2

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
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

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

Glossary

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

Surrogate Summary

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

Job ID: 400-178011-2

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)
400-178011-6	ROST4PZC-ROX-101419	102	105	101
LCS 400-462744/1002	Lab Control Sample	105	110	97
MB 400-462744/4	Method Blank	106	103	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-178011-6	ROST4PZC-ROX-101419	85	38	83	52	79	77
LCS 400-462401/2-A	Lab Control Sample	61	16	69	38	68	57
LCS 400-462401/4-A	Lab Control Sample	81	22	71	41	77	64
LCSD 400-462401/3-A	Lab Control Sample Dup	76	44	79	62	77	70
LCSD 400-462401/5-A	Lab Control Sample Dup	83	15	70	34	85	72
MB 400-462401/1-A	Method Blank	72	33	69	56	80	60

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-178011-6	ROST4PZC-ROX-101419	70	77	82
LCS 400-462401/2-A	Lab Control Sample	80	77	60
LCSD 400-462401/3-A	Lab Control Sample Dup	75	82	57
MB 400-462401/1-A	Method Blank	71	69	79

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-178011-2

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)**
400-178011-6	ROST4PZC-ROX-101419	67 p
LCS 400-462432/2-A	Lab Control Sample	130
LCSD 400-462432/3-A	Lab Control Sample Dup	128
MB 400-462432/1-A	Method Blank	80

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-178011-2

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: 400-178011-2

Client Sample ID: ROST4PZC-ROX-101419

Date Collected: 10/14/19 12:20
Date Received: 10/15/19 08:47

Lab Sample ID: 400-178011-6
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	462744	10/23/19 12:44	RS	TAL PEN
Total/NA	Prep	3520C			1050.8 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 23:57	VC1	TAL PEN
Total/NA	Prep	3520C			1050.8 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 10:48	KJA	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462569	10/22/19 14:19	KLR	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462401/1-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 21:01	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 09:56	KJA	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462432/1-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	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462889	10/24/19 08:28	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462744/4
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	462744	10/23/19 08:12	RS	TAL PEN

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-462401/2-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:27	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:14	KJA	TAL PEN

Lab Chronicle

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

Job ID: 400-178011-2

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

Lab Sample ID: LCS 400-462401/4-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:17	VC1	TAL PEN

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

Lab Sample ID: LCS 400-462432/2-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	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462493	10/21/19 18:27	KLR	TAL PEN

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

Lab Sample ID: LCS 400-462744/1002
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	462744	10/23/19 07:16	RS	TAL PEN

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

Lab Sample ID: LCSD 400-462401/3-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:52	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:31	KJA	TAL PEN

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

Lab Sample ID: LCSD 400-462401/5-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:42	VC1	TAL PEN

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

Lab Sample ID: LCSD 400-462432/3-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	462432	10/21/19 13:44	KLR	TAL PEN
Total/NA	Analysis	8011		1			462493	10/21/19 18:51	KLR	TAL PEN

Laboratory References:
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

Job ID: 400-178011-2

GC/MS VOA

Analysis Batch: 462744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-6	ROST4PZC-ROX-101419	Total/NA	Water	8260B	
MB 400-462744/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462744/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 462401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-6	ROST4PZC-ROX-101419	Total/NA	Water	3520C	
MB 400-462401/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-6	ROST4PZC-ROX-101419	Total/NA	Water	8270D LL	462401
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D LL	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462401

Analysis Batch: 462867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-6	ROST4PZC-ROX-101419	Total/NA	Water	8270D	462401
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401

GC Semi VOA

Prep Batch: 462432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-6	ROST4PZC-ROX-101419	Total/NA	Water	8011	
MB 400-462432/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462432/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462432/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 462493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-462432/2-A	Lab Control Sample	Total/NA	Water	8011	462432
LCSD 400-462432/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462432

Analysis Batch: 462569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178011-6	ROST4PZC-ROX-101419	Total/NA	Water	8011	462432

Analysis Batch: 462889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462432/1-A	Method Blank	Total/NA	Water	8011	462432

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

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/23/19 08:12	1
Acrolein	ND		20	10	ug/L			10/23/19 08:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:12	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:12	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:12	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:12	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:12	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:12	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:12	1

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

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:12	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:12	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:12	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 08:12*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*10/23/19 08:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 08:12*	*1*

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	193		ug/L		96	43 - 160
Acrolein	500	550		ug/L		110	38 - 160
Acrylonitrile	500	482		ug/L		96	64 - 142
Benzene	50.0	44.5		ug/L		89	70 - 130
Bromobenzene	50.0	44.3		ug/L		89	70 - 132
Bromochloromethane	50.0	43.9		ug/L		88	70 - 130
Bromodichloromethane	50.0	46.6		ug/L		93	67 - 133
Bromoform	50.0	51.8		ug/L		104	57 - 140
Bromomethane	50.0	51.6		ug/L		103	10 - 160
2-Butanone (MEK)	200	186		ug/L		93	61 - 145
Carbon disulfide	50.0	38.9		ug/L		78	61 - 137
Carbon tetrachloride	50.0	45.8		ug/L		92	61 - 137
Chlorobenzene	50.0	43.2		ug/L		86	70 - 130
Dibromochloromethane	50.0	38.5		ug/L		77	67 - 135
Chloroethane	50.0	50.0		ug/L		100	55 - 141

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

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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	45.3		ug/L		91	10 - 160
Chloroform	50.0	45.6		ug/L		91	69 - 130
1-Chlorohexane	50.0	44.3		ug/L		89	69 - 130
Chloromethane	50.0	38.5		ug/L		77	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	41.8		ug/L		84	69 - 132
1,2-Dichlorobenzene	50.0	42.1		ug/L		84	67 - 130
1,3-Dichlorobenzene	50.0	42.5		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
Dichlorodifluoromethane	50.0	30.3		ug/L		61	41 - 146
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	43.6		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	44.6		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	42.3		ug/L		85	70 - 130
2,2-Dichloropropane	50.0	45.0		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	45.7		ug/L		91	70 - 130
Ethylbenzene	50.0	42.9		ug/L		86	70 - 130
Ethyl methacrylate	50.0	41.5		ug/L		83	68 - 130
Hexachlorobutadiene	50.0	45.6		ug/L		91	53 - 140
2-Hexanone	200	193		ug/L		97	65 - 137
Isopropylbenzene	50.0	38.8		ug/L		78	70 - 130
Methylene bromide	50.0	45.4		ug/L		91	70 - 130
Methylene Chloride	50.0	41.6		ug/L		83	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	40.6		ug/L		81	66 - 130
m-Xylene & p-Xylene	50.0	43.0		ug/L		86	70 - 130
Naphthalene	50.0	29.8		ug/L		60	47 - 149
n-Butylbenzene	50.0	39.2		ug/L		78	67 - 130
N-Propylbenzene	50.0	41.9		ug/L		84	70 - 130
o-Chlorotoluene	50.0	45.5		ug/L		91	70 - 130
o-Xylene	50.0	41.8		ug/L		84	70 - 130
p-Chlorotoluene	50.0	41.8		ug/L		84	70 - 130
p-Isopropyltoluene	50.0	39.6		ug/L		79	65 - 130
sec-Butylbenzene	50.0	40.9		ug/L		82	66 - 130
Styrene	50.0	42.2		ug/L		84	70 - 130
tert-Butylbenzene	50.0	40.2		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	37.6		ug/L		75	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 131
Tetrachloroethene	50.0	39.7		ug/L		79	65 - 130
Toluene	50.0	43.4		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	45.2		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	39.6		ug/L		79	63 - 130
1,2,3-Trichlorobenzene	50.0	34.8		ug/L		70	60 - 138
1,2,4-Trichlorobenzene	50.0	37.8		ug/L		76	60 - 140
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	70 - 130
Trichloroethene	50.0	42.2		ug/L		84	70 - 130
Trichlorofluoromethane	50.0	51.3		ug/L		103	65 - 138

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

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.2		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	41.5		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	50.0	40.3		ug/L		81	69 - 130
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	46.2		ug/L		92	59 - 136
Xylenes, Total	100	84.8		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*78 - 118*
Dibromofluoromethane	*110*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzenethiol	ND		10	1.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzoic acid	ND		30	7.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzyl alcohol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/21/19 10:59	10/23/19 21:01	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/21/19 10:59	10/23/19 21:01	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloroaniline	ND		10	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chlorophenol	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenzofuran	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Diethyl phthalate	ND		10	0.70	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/21/19 10:59	10/23/19 21:01	1
1,4-Dioxane	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachloroethane	ND		10	4.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Indene	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Isophorone	ND		10	0.57	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Methylphenol	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitroaniline	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
3-Nitroaniline	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitroaniline	ND		10	2.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Nitrobenzene	ND		10	0.55	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitrophenol	ND		10	0.65	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitrophenol	ND		10	2.1	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pentachlorophenol	ND		20	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Phenol	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pyridine	ND		10	3.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Quinoline	ND		10	6.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2-Fluorophenol	*33*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Phenol-d5	*56*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Terphenyl-d14	*80*		*53 - 125*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*10/21/19 10:59*	*10/23/19 21:01*	*1*

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	10.7		ug/L		36	29 - 120
Benzoic acid	117	69.5		ug/L		60	10 - 150
Benzyl alcohol	30.0	9.76	J	ug/L		33	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.0		ug/L		70	45 - 120
Bis(2-chloroethyl)ether	30.0	32.3		ug/L		108	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.6		ug/L		69	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	19.2		ug/L		64	48 - 150
4-Bromophenyl phenyl ether	30.0	17.3		ug/L		58	55 - 122
Butyl benzyl phthalate	30.0	19.4		ug/L		65	46 - 145
4-Chloroaniline	30.0	19.1		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	20.8		ug/L		69	39 - 140

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

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	17.7		ug/L		59	52 - 120
2-Chlorophenol	30.0	11.8		ug/L		39	34 - 120
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124
Dibenz[a,h]acridine	30.0	17.2		ug/L		57	46 - 149
Dibenzofuran	30.0	19.3		ug/L		64	58 - 123
3,3'-Dichlorobenzidine	40.0	30.7		ug/L		77	39 - 135
2,4-Dichlorophenol	30.0	16.9		ug/L		56	39 - 128
Diethyl phthalate	30.0	22.6		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	20.0		ug/L		67	44 - 120
Dimethyl phthalate	30.0	20.7		ug/L		69	50 - 131
Di-n-butyl phthalate	30.0	19.5		ug/L		65	55 - 131
4,6-Dinitro-ortho-cresol	60.0	42.7		ug/L		71	10 - 150
2,4-Dinitrophenol	60.0	48.4		ug/L		81	10 - 150
2,4-Dinitrotoluene	30.0	22.9		ug/L		76	58 - 140
2,6-Dinitrotoluene	30.0	21.0		ug/L		70	57 - 130
Di-n-octyl phthalate	30.0	19.6		ug/L		65	50 - 150
1,4-Dioxane	30.0	12.3		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	19.7		ug/L		66	47 - 123
Hexachlorobenzene	30.0	17.9		ug/L		60	52 - 131
Hexachlorocyclopentadiene	30.0	8.44	J	ug/L		28	10 - 129
Hexachloroethane	30.0	15.7		ug/L		52	41 - 120
Indene	30.0	18.3		ug/L		61	47 - 120
Isophorone	30.0	20.8		ug/L		69	49 - 120
2-Methylphenol	30.0	21.4		ug/L		71	39 - 123
3 & 4 Methylphenol	30.0	17.3	J	ug/L		58	38 - 121
2-Nitroaniline	30.0	22.4		ug/L		75	47 - 150
3-Nitroaniline	30.0	20.0		ug/L		67	34 - 132
4-Nitroaniline	30.0	23.5		ug/L		78	41 - 135
Nitrobenzene	30.0	20.8		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136
4-Nitrophenol	60.0	41.4		ug/L		69	10 - 150
N-Nitrosodimethylamine	30.0	22.1		ug/L		74	22 - 148
N-Nitrosodi-n-propylamine	30.0	23.5		ug/L		78	44 - 120
N-Nitrosodiphenylamine	29.8	19.3		ug/L		65	56 - 120
Pentachlorophenol	60.0	34.6		ug/L		58	15 - 141
Phenol	30.0	11.5		ug/L		38	33 - 120
Pyridine	60.0	34.3		ug/L		57	26 - 120
Quinoline	30.0	19.9		ug/L		66	51 - 129
2,4,5-Trichlorophenol	30.0	19.0		ug/L		63	38 - 147
2,4,6-Trichlorophenol	30.0	16.9		ug/L		56	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*16*		*10 - 120*
Nitrobenzene-d5	*69*		*27 - 120*
Phenol-d5	*38*		*10 - 120*
Terphenyl-d14	*68*		*53 - 125*

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

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	57		15 - 135

Lab Sample ID: LCS 400-462401/4-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

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	81		34 - 120
2-Fluorophenol	22		10 - 120
Nitrobenzene-d5	71		27 - 120
Phenol-d5	41		10 - 120
Terphenyl-d14	77		53 - 125
2,4,6-Tribromophenol	64		15 - 135

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	14.4		ug/L		48	29 - 120	29	30
Benzoic acid	117	89.2		ug/L		77	10 - 150	25	30
Benzyl alcohol	30.0	10.9		ug/L		36	19 - 125	11	30
Bis(2-chloroethoxy)methane	30.0	23.1		ug/L		77	45 - 120	10	30
Bis(2-chloroethyl)ether	30.0	33.8		ug/L		113	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	23.5		ug/L		78	30 - 125	13	30
Bis(2-ethylhexyl) phthalate	30.0	22.3		ug/L		74	48 - 150	15	30
4-Bromophenyl phenyl ether	30.0	20.3		ug/L		68	55 - 122	16	30
Butyl benzyl phthalate	30.0	22.4		ug/L		75	46 - 145	14	30
4-Chloroaniline	30.0	16.0		ug/L		53	30 - 120	18	30
4-Chloro-3-methylphenol	30.0	24.0		ug/L		80	39 - 140	14	30
2-Chloronaphthalene	30.0	22.1		ug/L		74	52 - 120	22	30
2-Chlorophenol	30.0	20.3	*	ug/L		68	34 - 120	53	30
4-Chlorophenyl phenyl ether	30.0	21.3		ug/L		71	58 - 124	17	30
Dibenz[a,h]acridine	30.0	21.3		ug/L		71	46 - 149	21	30
Dibenzofuran	30.0	22.9		ug/L		76	58 - 123	17	30
3,3'-Dichlorobenzidine	40.0	35.4		ug/L		88	39 - 135	14	30
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128	30	30
Diethyl phthalate	30.0	25.9		ug/L		86	44 - 146	14	30
2,4-Dimethylphenol	30.0	23.7		ug/L		79	44 - 120	17	30
Dimethyl phthalate	30.0	23.7		ug/L		79	50 - 131	13	30
Di-n-butyl phthalate	30.0	22.7		ug/L		76	55 - 131	15	30
4,6-Dinitro-ortho-cresol	60.0	50.9		ug/L		85	10 - 150	18	30
2,4-Dinitrophenol	60.0	55.5		ug/L		92	10 - 150	14	30
2,4-Dinitrotoluene	30.0	25.8		ug/L		86	58 - 140	12	30
2,6-Dinitrotoluene	30.0	24.3		ug/L		81	57 - 130	15	30

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

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	23.4		ug/L		78	50 - 150	18	30
1,4-Dioxane	30.0	14.7		ug/L		49	25 - 120	18	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.2		ug/L		77	47 - 123	16	30
Hexachlorobenzene	30.0	21.1		ug/L		70	52 - 131	16	30
Hexachlorocyclopentadiene	30.0	11.7	J *	ug/L		39	10 - 129	33	30
Hexachloroethane	30.0	20.1		ug/L		67	41 - 120	25	30
Indene	30.0	23.1		ug/L		77	47 - 120	23	30
Isophorone	30.0	23.0		ug/L		77	49 - 120	10	30
2-Methylphenol	30.0	28.7		ug/L		96	39 - 123	29	30
3 & 4 Methylphenol	30.0	23.7	*	ug/L		79	38 - 121	32	30
2-Nitroaniline	30.0	25.8		ug/L		86	47 - 150	14	30
3-Nitroaniline	30.0	22.4		ug/L		75	34 - 132	11	30
4-Nitroaniline	30.0	26.5		ug/L		88	41 - 135	12	30
Nitrobenzene	30.0	23.2		ug/L		77	47 - 120	11	30
2-Nitrophenol	30.0	23.9		ug/L		80	28 - 136	27	30
4-Nitrophenol	60.0	45.5		ug/L		76	10 - 150	9	30
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148	14	30
N-Nitrosodi-n-propylamine	30.0	26.7		ug/L		89	44 - 120	13	30
N-Nitrosodiphenylamine	29.8	22.3		ug/L		75	56 - 120	15	30
Pentachlorophenol	60.0	41.8		ug/L		70	15 - 141	19	30
Phenol	30.0	22.2	*	ug/L		74	33 - 120	64	30
Pyridine	60.0	41.0		ug/L		68	26 - 120	18	30
Quinoline	30.0	22.8		ug/L		76	51 - 129	13	30
2,4,5-Trichlorophenol	30.0	22.8		ug/L		76	38 - 147	18	30
2,4,6-Trichlorophenol	30.0	22.4		ug/L		75	36 - 139	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*62*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*70*		*15 - 135*

Lab Sample ID: LCSD 400-462401/5-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	90	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*15*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*34*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*

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

Lab Sample ID: LCSD 400-462401/5-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	72		15 - 135

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

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Anthracene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Chrysene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluoranthene	0.0233	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluorene	ND		0.20	0.021	ug/L		10/21/19 10:59	10/23/19 09:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Phenanthrene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Pyrene	0.0235	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	71		33 - 138	10/21/19 10:59	10/23/19 09:56	1
2-Fluorobiphenyl	69		15 - 122	10/21/19 10:59	10/23/19 09:56	1
Nitrobenzene-d5	79		19 - 130	10/21/19 10:59	10/23/19 09:56	1

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.6		ug/L		85	41 - 120
Acenaphthylene	30.0	27.9		ug/L		93	44 - 120
Anthracene	30.0	24.4		ug/L		81	49 - 120
Benzo[a]anthracene	30.0	23.8		ug/L		79	61 - 135
Benzo[a]pyrene	30.0	25.6		ug/L		85	52 - 120
Benzo[b]fluoranthene	30.0	26.7		ug/L		89	53 - 134
Benzo[g,h,i]perylene	30.0	20.3		ug/L		68	47 - 133
Benzo[k]fluoranthene	30.0	27.0		ug/L		90	57 - 134
Chrysene	30.0	22.8		ug/L		76	55 - 122
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146
Fluoranthene	30.0	24.4		ug/L		81	54 - 128

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

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	26.4		ug/L		88	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.1		ug/L		74	43 - 142
Phenanthrene	30.0	23.6		ug/L		79	48 - 120
Pyrene	30.0	24.9		ug/L		83	48 - 132
1-Methylnaphthalene	30.0	20.8		ug/L		69	41 - 120
2-Methylnaphthalene	30.0	20.3		ug/L		68	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*80*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*60*		*19 - 130*

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.2		ug/L		91	41 - 120	6	56
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120	5	56
Anthracene	30.0	25.5		ug/L		85	49 - 120	5	51
Benzo[a]anthracene	30.0	23.1		ug/L		77	61 - 135	3	49
Benzo[a]pyrene	30.0	25.4		ug/L		85	52 - 120	1	50
Benzo[b]fluoranthene	30.0	26.0		ug/L		87	53 - 134	3	54
Benzo[g,h,i]perylene	30.0	20.5		ug/L		68	47 - 133	1	50
Benzo[k]fluoranthene	30.0	27.3		ug/L		91	57 - 134	1	52
Chrysene	30.0	22.4		ug/L		75	55 - 122	2	50
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146	0	50
Fluoranthene	30.0	24.8		ug/L		83	54 - 128	2	52
Fluorene	30.0	26.8		ug/L		89	45 - 125	2	56
Indeno[1,2,3-cd]pyrene	30.0	22.3		ug/L		74	43 - 142	1	51
Phenanthrene	30.0	24.0		ug/L		80	48 - 120	1	56
Pyrene	30.0	24.1		ug/L		80	48 - 132	3	52
1-Methylnaphthalene	30.0	23.2		ug/L		77	41 - 120	11	55
2-Methylnaphthalene	30.0	22.5		ug/L		75	32 - 124	10	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*75*		*33 - 138*
2-Fluorobiphenyl	*82*		*15 - 122*
Nitrobenzene-d5	*57*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462432/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462432

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		10/21/19 13:44	10/24/19 08:28	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-462432/1-A
Matrix: Water
Analysis Batch: 462889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/21/19 13:44	10/24/19 08:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*10/21/19 13:44*	*10/24/19 08:28*	*1*

Lab Sample ID: LCS 400-462432/2-A
Matrix: Water
Analysis Batch: 462493

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.0820		ug/L		82	60 - 140
1,2-Dibromoethane	0.100	0.102		ug/L		102	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*130*		*51 - 149*

Lab Sample ID: LCSD 400-462432/3-A
Matrix: Water
Analysis Batch: 462493

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462432

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.0798		ug/L		80	60 - 140	3	30
1,2-Dibromoethane	0.100	0.103		ug/L		103	60 - 140	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*128*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☐ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (Lab Vendor #: 1364589 (TestAmerica))

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☒ OTHER _ENV. SERVICES	

Print Bill To Contact Name: Bob Billman

PO #: 60592794 - 1.03.004 | 60592794 - 1.03.0044

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10/14/19

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 - 1.03.004 | 60592794 - 1.03.0044

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

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PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): B Howell B Burkeson

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill to Contact - 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 - 1.03.004 | UNIT COST 60592794 - 1.03.0044

400-178011 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-101419-8011	10/14/19	0000	Water	X					2			2		
	TB-ROX-101419-8260	"	0000	"	X					2	2				
	MW10-ROX-101419	"	0930	"	X			X		6	2	1	2	1	
	MW9-ROX-101419	"	1015	"	X			X		6	2	1	2	1	
	MW3-ROX-101419	"	1110	"	X			X		6	2	1	2	1	
	ROST4PZC-ROX-101419	"	1220	"	X			X		6	2	1	2	1	
	ROST3MW-ROX-101419	▽	1310	▽	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	Fedex: 1194 6302 0134, 1194 6302 0123, 1194 6302 0112, 1194 6302 0101	10/14/19	1800
Relinquished by (Signature)	Received by (Signature) N Meadaway	Date 10-15-19	Time 847
Relinquished by (Signature)	Received by (Signature)	Date	Time

Version: 14Dec15

Custody Seal #'s: 1090685, 1090689, 1090687, 1090688, 1090691

3.9°C, 1.3°C, 2.7°C, 4.6°C, IR7

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10/24/2019

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

PlaNet Site or Project ID: 25278

PO #: 60592794 - 1.03.004 | 60592794 - 1.03.0044

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10/14/19

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 - 1.03.004 | 60592794 - 1.03.0044

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

Invoice To Contact / E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): T. Sores M. DAngelo, B. Howell

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - EWQCB 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 - 1.03.004: VOC 8260 | SVOC 8270

UNIT COST 60592794 - 1.03.0044: VOC 8011 | PAH 8270LL

400-178013 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-101419-8011-SS	10/14/19	0000	Water	X					2			2	
	TB-ROX-101419-8260-SS	"	0000	"	X					2	2			
	P93C-ROX-101419	"	1255	"	X			X		6	2	1	2	1
	P74-ROX-101419	↓	1405	↓	X			X		6	2	1	2	1

Relinquished by (Signature)	Received by (Signature)	Date	Time
	Fedex: 1194 6302 0134 1194 6307 0112 1194 6302 0123 1194 6307 0101	10/14/19	1600
	M Treadaway	10-15-19	847

custody seal #'s: 10906084 10906088 10906085 10906089 10906086 10906090

3.9C, 1.3C, 2.7C, 4.6C IR7

Version: 14Dec15

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10/24/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-178011-2

Login Number: 178011
List Number: 1
Creator: Gore, Beija K

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	1090684,1090685,1090691,1090690,1090687,1090686,1090688,1090689
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	3.9°C, 1.3 °C, 2.7 °C, 4.6 °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: 400-178011-2

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
USDA	Federal	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-178067-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/27/2019

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

Sample Identification	Sample Identification
TB-ROX-101519-8011	TB-ROX-101519-8260
MW5-ROX-101519	MW22-ROX-101519
MW22-ROX-101519-Dup	P59-ROX-101519
P57-ROX-101519	P57-ROX-101519-Dup
TB-ROX-101519-8011-SS	TB-ROX-101519-8260-SS
P56-ROX-101519	T12-ROX-101519
P93A-ROX-101519-EB	P93A-ROX-101519
P93D-ROX-101519	P93B-ROX-101519
P93B-ROX-101519-Dup	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, laboratory case narrative indicated PAHs were detected in the method blank, and although not indicated in the laboratory case narrative, analytes were detected in the equipment blank P93A-ROX-101519-EB. Several VOC and SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several surrogate recoveries were outside criteria in several investigative and QC samples. In field duplicate pair MW22-ROX-101519/MW22-ROX-101519-Dup, several VOCs were qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**J**). Several samples were diluted to bring VOCs and phenol into calibration range of the instrument. The continuing calibration verifications for several SVOCs were outside evaluation criteria. 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
P93A-ROX-101519-EB	VOCs	Benzene	0.73 µg/L
P93A-ROX-101519-EB	SVOCs	bis(2-Ethylhexyl) phthalate	14 µg/L
MB 400-462401/1-A	PAHs	Fluoranthene	0.0233 µg/L
MB 400-462401/1-A	PAHs	Pyrene	0.0235 µg/L
MB 400-462605/1-A	PAHs	Anthracene	0.0388 µg/L
MB 400-462605/1-A	PAHs	Benzo[a]anthracene	0.0872 µg/L
MB 400-462605/1-A	PAHs	Benzo[a]pyrene	0.0949 µg/L
MB 400-462605/1-A	PAHs	Benzo[b]fluoranthene	0.0858 µg/L
MB 400-462605/1-A	PAHs	Benzo[g,h,i]perylene	0.0798 µg/L
MB 400-462605/1-A	PAHs	Benzo[k]fluoranthene	0.0982 µg/L
MB 400-462605/1-A	PAHs	Chrysene	0.0787 µg/L
MB 400-462605/1-A	PAHs	Dibenz(a,h)anthracene	0.0892 µg/L
MB 400-462605/1-A	PAHs	Fluoranthene	0.0407 µg/L
MB 400-462605/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.0998 µg/L
MB 400-462605/1-A	PAHs	Phenanthrene	0.0375 µg/L
MB 400-462605/1-A	PAHs	Pyrene	0.0452 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
P59-ROX-101519	PAHs	Pyrene	-	**U**
P93A-ROX-101519	PAHs	Benzo[b]fluoranthene	-	**U**
P93A-ROX-101519	PAHs	Benzo[g,h,i]perylene	-	**U**
P93A-ROX-101519	PAHs	Benzo[k]fluoranthene	-	**U**
P93A-ROX-101519	PAHs	Fluoranthene	-	**U**
P93A-ROX-101519	PAHs	Indeno[1,2,3-cd]pyrene	-	**U**
P93A-ROX-101519	PAHs	Phenanthrene	-	**U**
P93A-ROX-101519	PAHs	Pyrene	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-463326/1002	VOCs	Bromomethane	**176**	NA	10-160

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-463326/1002	VOCs	Trichlorofluoromethane	**145**	NA	65-138
LCS/LCSD 400-462401/2-A/3-A	SVOCs	2-Chlorophenol	39/68	**53**	34-120/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	28/39	**33**	10-129/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	3&4 Methylphenol	58/79	**32**	38-121/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Phenol	38/74	**64**	33-120/30
LCS/LCSD 400-462401/4-A/5-A	SVOCs	Benzenethiol	**0.8/2**	**90**	10-120/30
LCS/LCSD 400-462605/6-A/7-A	SVOCs	Benzenethiol	**3/3**	1	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-101519	SVOCs	Benzenethiol	**UJ**
MW22-ROX-101519	SVOCs	Benzenethiol	**UJ**
MW22-ROX-101519-Dup	SVOCs	Benzenethiol	**UJ**
P59-ROX-101519	SVOCs	Benzenethiol	**UJ**
P57-ROX-101519	SVOCs	Benzenethiol	**UJ**
P57-ROX-101519-Dup	SVOCs	Benzenethiol	**UJ**
P56-ROX-101519	SVOCs	Benzenethiol	**UJ**
T12-ROX-101519	SVOCs	Benzenethiol	**UJ**
P93A-ROX-101519	SVOCs	Benzenethiol	**UJ**
P93D-ROX-101519	SVOCs	Benzenethiol	**UJ**
P93B-ROX-101519	SVOCs	Benzenethiol	**UJ**
P93B-ROX-101519-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW5-ROX-101519	VOCs	4-Bromofluorobenzene	**122**	78-118
P56-ROX-101519	PAHs	Nitrobenzene-d_5	**179**	19-130
P56-ROX-101519	SVOCs	Terphenyl-d_{14}	**44**	53-125
MB 400-462605/1-A	PAHs	Terphenyl-d_{14}	**144**	33-138

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

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW22-ROX-101519	MW22-ROX-101519-Dup
P57-ROX-101519	P57-ROX-101519-Dup
P93B-ROX-101519	P93B-ROX-101519-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW22-ROX-101519	MW22-ROX-101519-Dup	VOCs	m,p-Xylene	**58**	**J/J**
MW22-ROX-101519	MW22-ROX-101519-Dup	VOCs	n-Propylbenzene	**27**	**J/J**
MW22-ROX-101519	MW22-ROX-101519-Dup	VOCs	Xylenes (total)	**53**	**J/J**
MW22-ROX-101519	MW22-ROX-101519-Dup	VOCs	1,2,4-Trimethylbenzene	**25**	**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 several analytes were outside acceptance criteria and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-101519	SVOCs	Dibenz[a,h]acridine	UJ
MW22-ROX-101519	SVOCs	Benzyl alcohol	UJ
MW22-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
MW22-ROX-101519	SVOCs	Indene	J
MW22-ROX-101519-Dup	SVOCs	Benzyl alcohol	UJ
MW22-ROX-101519-Dup	SVOCs	Hexachlorocyclopentadiene	UJ
MW22-ROX-101519-Dup	SVOCs	Indene	J
P59-ROX-101519	SVOCs	Benzyl alcohol	UJ
P59-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
P59-ROX-101519	SVOCs	Indene	J
P57-ROX-101519	SVOCs	Benzyl alcohol	UJ
P57-ROX-101519	SVOCs	Indene	UJ
P57-ROX-101519	SVOCs	n-Nitrosodimethylamine	UJ
P57-ROX-101519-Dup	SVOCs	Benzyl alcohol	UJ
P57-ROX-101519-Dup	SVOCs	Indene	UJ
P57-ROX-101519-Dup	SVOCs	n-Nitrosodimethylamine	UJ
P56-ROX-101519	SVOCs	Benzyl alcohol	UJ
P56-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
T12-ROX-101519	SVOCs	Benzyl alcohol	UJ
T12-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
T12-ROX-101519	SVOCs	Indene	J
P93A-ROX-101519	SVOCs	Benzyl alcohol	UJ
P93A-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
P93D-ROX-101519	SVOCs	Benzyl alcohol	UJ
P93D-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
P93B-ROX-101519	SVOCs	Benzyl alcohol	UJ
P93B-ROX-101519	SVOCs	Hexachlorocyclopentadiene	UJ
P93B-ROX-101519-Dup	SVOCs	Benzyl alcohol	UJ
P93B-ROX-101519-Dup	SVOCs	Hexachlorocyclopentadiene	UJ

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 400-178067-1
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:
11/12/2019 9:57:15 AM

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



LINKS

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Reviewed 11/27/19 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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Case Narrative

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

Job ID: 400-178067-1

Job ID: 400-178067-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-178067-1

Comments
Results for sample, ROST4PZE-ROX-101519 (400-178067-4), are reported separately.

Receipt
The samples were received on 10/16/2019 9:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.2° C, 0.4° C, 0.5° C, 1.4° C and 2.6° C.

GC/MS VOA
Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-451121 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101519-8260 (400-178067-2), MW5-ROX-101519 (400-178067-3), MW22-ROX-101519 (400-178067-5), MW22-ROX-101519-DUP (400-178067-6), P59-ROX-101519 (400-178067-7), P57-ROX-101519 (400-178067-8), P57-ROX-101519-DUP (400-178067-9), TB-ROX-101519-8260-SS (400-178067-11), P56-ROX-101519 (400-178067-12), T12-ROX-101519 (400-178067-13), P93A-ROX-101519-EB (400-178067-14), P93A-ROX-101519 (400-178067-15), P93D-ROX-101519 (400-178067-16), P93B-ROX-101519 (400-178067-17), P93B-ROX-101519-DUP (400-178067-18). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: Surrogate recovery for the following sample was outside control limits: MW5-ROX-101519 (400-178067-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: P59-ROX-101519 (400-178067-7), P57-ROX-101519 (400-178067-8), P57-ROX-101519-DUP (400-178067-9), T12-ROX-101519 (400-178067-13), P93A-ROX-101519 (400-178067-15), P93B-ROX-101519 (400-178067-17), P93B-ROX-101519-DUP (400-178067-18). Elevated reporting limits (RLs) are provided.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-463326 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-463326 was outside control limits. Sample non-homogeneity is suspected.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-463326 recovered outside control limits for the following analytes: Trichlorofluoromethane and Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270D LL: The method blank for preparation batch 400-462401 and analytical batch 400-462759 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 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: P56-ROX-101519 (400-178067-12), (MB 400-462605/1-A). These results have been reported and qualified.

Method 8270D LL: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-462605 and analytical batch 400-464002: Benzo[a]anthracene. This is not indicative of a systematic control problem because these were random

Job ID: 400-178067-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

marginal exceedances. Qualified results have been reported.

Method 8270D LL: The surrogate recovery for the blank associated with preparation batch 400-462605 and analytical batch 400-464002 was outside the upper control limits.

Method 8270D LL: The method blank for preparation batch 400-462605 and analytical batch 400-464437 contained Indeno[1,2,3-cd]pyrene, Pyrene, Benzo[b]fluoranthene, Fluoranthene, Phenanthrene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Benzo[a]anthracene, Benzo[a]pyrene 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.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463014 recovered above the upper control limit for 2-Methylphenol, 2,4-Dinitrotoluene and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-463014 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine, Indene and Benzyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene, Phenol, 2-Chlorophenol and 3 & 4 Methylphenol.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462401 and analytical batch 400-462867 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. Benzenethiol Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The initial calibration verification (ICV) analyzed in batch 400-457655 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The initial calibration verification (ICV) analyzed in batch 400-462934 was outside method criteria for the following analyte(s): Benzoic acid. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464353 recovered above the upper control limit for N-Nitrosodimethylamine and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464353 recovered above the upper control limit for Indene. The samples associated with this CCV were less than the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464353 recovered outside acceptance criteria, low biased, for Benzyl alcohol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462605 and analytical batch 400-464293 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: 400-178067-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: P56-ROX-101519 (400-178067-12). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-464466 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 8270D: Bis(2-ethylhexyl) phthalate is known to be a common lab contaminant. This compound was detected in sample P93A-ROX-101519-EB (400-178067-14) , but not in the associated method blank. Reanalysis of the extract was performed to confirm the detection. Confirmation by re-extraction was not performed as the holding time has expired for this sample.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-463064 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: 400-178067-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-178067-1	TB-ROX-101519-8011	Water	10/15/19 00:00	10/16/19 09:22	
400-178067-2	TB-ROX-101519-8260	Water	10/15/19 00:00	10/16/19 09:22	
400-178067-3	MW5-ROX-101519	Water	10/15/19 09:25	10/16/19 09:22	
400-178067-5	MW22-ROX-101519	Water	10/15/19 11:35	10/16/19 09:22	
400-178067-6	MW22-ROX-101519-DUP	Water	10/15/19 11:35	10/16/19 09:22	
400-178067-7	P59-ROX-101519	Water	10/15/19 13:20	10/16/19 09:22	
400-178067-8	P57-ROX-101519	Water	10/15/19 14:15	10/16/19 09:22	
400-178067-9	P57-ROX-101519-DUP	Water	10/15/19 14:15	10/16/19 09:22	
400-178067-10	TB-ROX-101519-8011-SS	Water	10/15/19 00:00	10/16/19 09:22	
400-178067-11	TB-ROX-101519-8260-SS	Water	10/15/19 00:00	10/16/19 09:22	
400-178067-12	P56-ROX-101519	Water	10/15/19 09:45	10/16/19 09:22	
400-178067-13	T12-ROX-101519	Water	10/15/19 10:35	10/16/19 09:22	
400-178067-14	P93A-ROX-101519-EB	Water	10/15/19 12:10	10/16/19 09:22	
400-178067-15	P93A-ROX-101519	Water	10/15/19 12:55	10/16/19 09:22	
400-178067-16	P93D-ROX-101519	Water	10/15/19 13:25	10/16/19 09:22	
400-178067-17	P93B-ROX-101519	Water	10/15/19 14:15	10/16/19 09:22	
400-178067-18	P93B-ROX-101519-DUP	Water	10/15/19 14:15	10/16/19 09:22	

Detection Summary

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

Job ID: 400-178067-1

Client Sample ID: TB-ROX-101519-8011 — Lab Sample ID: 400-178067-1

No Detections.

Client Sample ID: TB-ROX-101519-8260 — Lab Sample ID: 400-178067-2

No Detections.

Client Sample ID: MW5-ROX-101519 — Lab Sample ID: 400-178067-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.4		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
Chloroform	1.7		1.0	0.60	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.52	J	1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	2.3		1.0	0.53	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	3.2		1.0	0.74	ug/L	1		8260B	Total/NA
N-Propylbenzene	1.1		1.0	0.69	ug/L	1		8260B	Total/NA
tert-Butylbenzene	2.6		1.0	0.63	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.081	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW22-ROX-101519 — Lab Sample ID: 400-178067-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J	25	10	ug/L	1		8260B	Total/NA
Benzene	3.5		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	4.6	J	25	2.6	ug/L	1		8260B	Total/NA
Isopropylbenzene	11		1.0	0.53	ug/L	1		8260B	Total/NA
Naphthalene	28		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	21	J	1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	0.83	J	1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.4		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	1.2		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	8.9		1.0	0.41	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	20		1.0	0.56	ug/L	1		8260B	Total/NA
Ethylbenzene - DL	250		2.0	1.0	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene - DL	160	J	10	3.2	ug/L	2		8260B	Total/NA
o-Xylene - DL	14		10	1.2	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	55	J	2.0	1.6	ug/L	2		8260B	Total/NA
Xylenes, Total - DL	180	J	20	3.2	ug/L	2		8260B	Total/NA
1-Methylnaphthalene	2.2		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.5		0.19	0.019	ug/L	1		8270D LL	Total/NA
Indene	2.1	J	9.5	0.95	ug/L	1		8270D	Total/NA

Client Sample ID: MW22-ROX-101519-DUP — Lab Sample ID: 400-178067-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	25	10	ug/L	1		8260B	Total/NA
Benzene	3.9		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	4.2	J	25	2.6	ug/L	1		8260B	Total/NA
Isopropylbenzene	10		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	290	J	5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	32		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	16	J	1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	20		5.0	0.60	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.1		1.0	0.70	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: 400-178067-1

Client Sample ID: MW22-ROX-101519-DUP (Continued)

Lab Sample ID: 400-178067-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
tert-Butylbenzene	0.90	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	9.6		1.0	0.41	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	17		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	310	J	10	1.6	ug/L	1		8260B	Total/NA
Ethylbenzene - DL	300		2.0	1.0	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	71	J	2.0	1.6	ug/L	2		8260B	Total/NA
1-Methylnaphthalene	1.9		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.1		0.19	0.019	ug/L	1		8270D LL	Total/NA
Indene	2.3	J J	9.5	0.95	ug/L	1		8270D	Total/NA

Client Sample ID: P59-ROX-101519

Lab Sample ID: 400-178067-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2100		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	860		10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	41		10	5.3	ug/L	10		8260B	Total/NA
m-Xylene & p-Xylene	1300		50	16	ug/L	10		8260B	Total/NA
Naphthalene	150		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	66		10	6.9	ug/L	10		8260B	Total/NA
o-Xylene	170		50	6.0	ug/L	10		8260B	Total/NA
Toluene	740		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	380		10	8.2	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	90		10	5.6	ug/L	10		8260B	Total/NA
Xylenes, Total	1500		100	16	ug/L	10		8260B	Total/NA
Pyrene	~~0.11~~	J B N	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	13		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	19		0.19	0.019	ug/L	1		8270D LL	Total/NA
2,4-Dimethylphenol	4.2	J	9.5	3.3	ug/L	1		8270D	Total/NA
Indene	6.1	J J	9.5	0.95	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	3.3	J	19	0.99	ug/L	1		8270D	Total/NA
Phenol	20		9.5	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P57-ROX-101519

Lab Sample ID: 400-178067-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2300		20	7.6	ug/L	20		8260B	Total/NA
Ethylbenzene	12	J	20	10	ug/L	20		8260B	Total/NA
Isopropylbenzene	22		20	11	ug/L	20		8260B	Total/NA
Naphthalene	75		20	20	ug/L	20		8260B	Total/NA
N-Propylbenzene	25		20	14	ug/L	20		8260B	Total/NA
Toluene	14	J	20	8.2	ug/L	20		8260B	Total/NA
Acenaphthene	0.22		0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.37		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.29		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	28		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	30		0.19	0.019	ug/L	1		8270D LL	Total/NA
4-Chloroaniline	16		9.5	3.2	ug/L	1		8270D	Total/NA
Dibenzofuran	0.66	J	9.5	0.49	ug/L	1		8270D	Total/NA
Phenol - DL	79	*	48	12	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-178067-1

Client Sample ID: P57-ROX-101519-DUP — Lab Sample ID: 400-178067-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2300		20	7.6	ug/L	20		8260B	Total/NA
Isopropylbenzene	33		20	11	ug/L	20		8260B	Total/NA
Naphthalene	67		20	20	ug/L	20		8260B	Total/NA
N-Propylbenzene	20		20	14	ug/L	20		8260B	Total/NA
Acenaphthene	0.13	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	0.39		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.25		0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	24		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	26		0.19	0.019	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.56	J	9.6	0.50	ug/L	1		8270D	Total/NA
Phenol - DL	71	*	48	12	ug/L	5		8270D	Total/NA

Client Sample ID: TB-ROX-101519-8011-SS — Lab Sample ID: 400-178067-10

No Detections.

Client Sample ID: TB-ROX-101519-8260-SS — Lab Sample ID: 400-178067-11

No Detections.

Client Sample ID: P56-ROX-101519 — Lab Sample ID: 400-178067-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21	J	25	10	ug/L	1		8260B	Total/NA
Benzene	2.1		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	6.9	J	25	2.6	ug/L	1		8260B	Total/NA
Carbon disulfide	0.95	J	1.0	0.50	ug/L	1		8260B	Total/NA
Chloroform	2.9		1.0	0.60	ug/L	1		8260B	Total/NA
Ethylbenzene	21		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	19		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	75		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	13		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	3.6		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	24		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	2.9	J	5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.1		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.2		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	2.5		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	29		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	7.2		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	78		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.41		0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.98	B	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	19		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	20		0.19	0.019	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.57	J	9.5	0.49	ug/L	1		8270D	Total/NA

Client Sample ID: T12-ROX-101519 — Lab Sample ID: 400-178067-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2600		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	25		10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	14		10	5.3	ug/L	10		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-178067-1

Client Sample ID: T12-ROX-101519 (Continued)

Lab Sample ID: 400-178067-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	150		50	16	ug/L	10		8260B	Total/NA
Naphthalene	43		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	18		10	6.9	ug/L	10		8260B	Total/NA
o-Xylene	10	J	50	6.0	ug/L	10		8260B	Total/NA
Toluene	65		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	16		10	8.2	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	8.0	J	10	5.6	ug/L	10		8260B	Total/NA
Xylenes, Total	160		100	16	ug/L	10		8260B	Total/NA
Acenaphthene	0.22		0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.50	B	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	18		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	26		0.19	0.019	ug/L	1		8270D LL	Total/NA
Di-n-butyl phthalate	5.3	J	9.5	2.6	ug/L	1		8270D	Total/NA
Indene	1.5	J	9.5	0.95	ug/L	1		8270D	Total/NA
Phenol	63		9.5	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P93A-ROX-101519-EB

Lab Sample ID: 400-178067-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.73	J	1.0	0.38	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	14		9.5	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: P93A-ROX-101519

Lab Sample ID: 400-178067-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	25	J	50	25	ug/L	50		8260B	Total/NA
Benzene - DL	220000		1000	380	ug/L	1000		8260B	Total/NA
Benzo[b]fluoranthene	0.078	J B	0.19	0.038	ug/L	1		8270D LL	Total/NA
Benzo[g,h,i]perylene	0.041	J B	0.19	0.038	ug/L	1		8270D LL	Total/NA
Benzo[k]fluoranthene	0.039	J B	0.19	0.038	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.12	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene	0.050	J B	0.19	0.038	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.084	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
Pyrene	0.065	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	2.3		0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.53		0.19	0.019	ug/L	1		8270D LL	Total/NA
Phenol	59		9.5	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P93D-ROX-101519

Lab Sample ID: 400-178067-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.62	J	1.0	0.50	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.8		1.0	0.74	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.019	J	0.19	0.019	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.021	J	0.19	0.019	ug/L	1		8270D LL	Total/NA

Client Sample ID: P93B-ROX-101519

Lab Sample ID: 400-178067-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	170000		1000	380	ug/L	1000		8260B	Total/NA
Phenol - DL	150		48	12	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-178067-1

Client Sample ID: P93B-ROX-101519-DUP — **Lab Sample ID: 400-178067-18**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	150000		1000	380	ug/L	1000		8260B	Total/NA
Phenol - DL	130		48	12	ug/L	5		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 400-178067-1

Client Sample ID: TB-ROX-101519-8011
Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-1
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		0.035	0.0064	ug/L		10/24/19 08:25	10/24/19 19:54	1
1,2-Dibromoethane	ND		0.023	0.0059	ug/L		10/24/19 08:25	10/24/19 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*130*	*p*	*51 - 149*	*10/24/19 08:25*	*10/24/19 19:54*	*1*

Client Sample ID: TB-ROX-101519-8260

Lab Sample ID: 400-178067-2

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

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			10/23/19 12:00	1
Acrolein	ND		20	10	ug/L			10/23/19 12:00	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 12:00	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 12:00	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 12:00	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 12:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 12:00	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 12:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 12:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 12:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 12:00	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 12:00	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 12:00	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 12:00	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 12:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 12:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 12:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 12:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 12:00	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 12:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 12:00	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 12:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 12:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 12:00	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 12:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 12:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 12:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 12:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 12:00	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 12:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 12:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 12:00	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 12:00	1

Client Sample ID: TB-ROX-101519-8260

Lab Sample ID: 400-178067-2

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

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			10/23/19 12:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 12:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 12:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 12:00	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 12:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 12:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 12:00	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:00	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 12:00	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 12:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 12:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 12:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 12:00	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 12:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 12:00	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 12:00*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*10/23/19 12:00*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 12:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*78 - 118*		*10/24/19 15:47*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*10/24/19 15:47*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/24/19 15:47*	*1*

Client Sample Results

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

Job ID: 400-178067-1

Client Sample ID: MW5-ROX-101519

Lab Sample ID: 400-178067-3

Date Collected: 10/15/19 09:25
Date Received: 10/16/19 09:22

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			10/23/19 14:11	1
Acrolein	ND		20	10	ug/L			10/23/19 14:11	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 14:11	1
Benzene	4.4		1.0	0.38	ug/L			10/23/19 14:11	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 14:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 14:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 14:11	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 14:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 14:11	1
Carbon disulfide	0.59	J	1.0	0.50	ug/L			10/23/19 14:11	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 14:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 14:11	1
Chloroform	1.7		1.0	0.60	ug/L			10/23/19 14:11	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 14:11	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 14:11	1
cis-1,2-Dichloroethene	0.52	J	1.0	0.50	ug/L			10/23/19 14:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 14:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 14:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 14:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 14:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 14:11	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 14:11	1
Isopropylbenzene	2.3		1.0	0.53	ug/L			10/23/19 14:11	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 14:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 14:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 14:11	1
Methyl tert-butyl ether	3.2		1.0	0.74	ug/L			10/23/19 14:11	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 14:11	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 14:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 14:11	1
N-Propylbenzene	1.1		1.0	0.69	ug/L			10/23/19 14:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 14:11	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 14:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 14:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 14:11	1

Client Sample ID: MW5-ROX-101519
Date Collected: 10/15/19 09:25
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-3
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			10/23/19 14:11	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 14:11	1
tert-Butylbenzene	2.6		1.0	0.63	ug/L			10/23/19 14:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 14:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 14:11	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 14:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 14:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 14:11	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:11	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 14:11	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 14:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 14:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 14:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 14:11	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 14:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 14:11	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*	*X*	*78 - 118*		*10/23/19 14:11*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*10/23/19 14:11*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/23/19 14:11*	*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		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 19:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:12	1
Phenanthrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
1-Methylnaphthalene	0.081	J	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*44*		*33 - 138*	*10/22/19 10:54*	*11/01/19 19:12*	*1*
2-Fluorobiphenyl	*62*		*15 - 122*	*10/22/19 10:54*	*11/01/19 19:12*	*1*

Client Sample ID: MW5-ROX-101519

Lab Sample ID: 400-178067-3

Date Collected: 10/15/19 09:25
Date Received: 10/16/19 09:22

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	68		19 - 130	10/22/19 10:54	11/01/19 19:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		10/22/19 10:54	11/04/19 16:14	1
Benzenethiol	ND	UJ	9.5	1.6	ug/L		10/22/19 10:54	11/04/19 16:14	1
Benzoic acid	ND		29	7.0	ug/L		10/22/19 10:54	11/04/19 16:14	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/04/19 16:14	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/04/19 16:14	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		10/22/19 10:54	11/04/19 16:14	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/04/19 16:14	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/04/19 16:14	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		10/22/19 10:54	11/04/19 16:14	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/04/19 16:14	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/04/19 16:14	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/04/19 16:14	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/22/19 10:54	11/04/19 16:14	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/04/19 16:14	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/04/19 16:14	1
Dibenz[a,h]acridine	ND	UJ	9.5	2.9	ug/L		10/22/19 10:54	11/04/19 16:14	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/22/19 10:54	11/04/19 16:14	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/04/19 16:14	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/04/19 16:14	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/04/19 16:14	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/04/19 16:14	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/04/19 16:14	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/04/19 16:14	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/04/19 16:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/04/19 16:14	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/04/19 16:14	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		10/22/19 10:54	11/04/19 16:14	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/04/19 16:14	1
Indene	ND		9.5	0.95	ug/L		10/22/19 10:54	11/04/19 16:14	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/04/19 16:14	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/04/19 16:14	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/04/19 16:14	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/22/19 10:54	11/04/19 16:14	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/04/19 16:14	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/04/19 16:14	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/04/19 16:14	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/04/19 16:14	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/04/19 16:14	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/04/19 16:14	1

Client Sample ID: MW5-ROX-101519

Lab Sample ID: 400-178067-3

Date Collected: 10/15/19 09:25
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/04/19 16:14	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/04/19 16:14	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/04/19 16:14	1
Phenol	ND		9.5	2.5	ug/L		10/22/19 10:54	11/04/19 16:14	1
Pyridine	ND		9.5	3.1	ug/L		10/22/19 10:54	11/04/19 16:14	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/04/19 16:14	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/04/19 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*34 - 120*	*10/22/19 10:54*	*11/04/19 16:14*	*1*
2-Fluorophenol	*66*		*10 - 120*	*10/22/19 10:54*	*11/04/19 16:14*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*10/22/19 10:54*	*11/04/19 16:14*	*1*
Phenol-d5	*81*		*10 - 120*	*10/22/19 10:54*	*11/04/19 16:14*	*1*
Terphenyl-d14	*81*		*53 - 125*	*10/22/19 10:54*	*11/04/19 16:14*	*1*
2,4,6-Tribromophenol	*112*		*15 - 135*	*10/22/19 10:54*	*11/04/19 16:14*	*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		0.029	0.0053	ug/L		10/24/19 08:25	10/24/19 20:18	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		10/24/19 08:25	10/24/19 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*10/24/19 08:25*	*10/24/19 20:18*	*1*

Client Sample Results

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

Job ID: 400-178067-1

Client Sample ID: MW22-ROX-101519
Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	13	J	25	10	ug/L			10/24/19 17:59	1
Acrolein	ND		20	10	ug/L			10/24/19 17:59	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 17:59	1
Benzene	3.5		1.0	0.38	ug/L			10/24/19 17:59	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 17:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 17:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 17:59	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 17:59	1
2-Butanone (MEK)	4.6	J	25	2.6	ug/L			10/24/19 17:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 17:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/19 17:59	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 17:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 17:59	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 17:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 17:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 17:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 17:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 17:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 17:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 17:59	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 17:59	1
Isopropylbenzene	11		1.0	0.53	ug/L			10/24/19 17:59	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 17:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 17:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 17:59	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/24/19 17:59	1
Naphthalene	28		1.0	1.0	ug/L			10/24/19 17:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 17:59	1
N-Propylbenzene	21	J	1.0	0.69	ug/L			10/24/19 17:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 17:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 17:59	1
p-Isopropyltoluene	0.83	J	1.0	0.71	ug/L			10/24/19 17:59	1
sec-Butylbenzene	1.4		1.0	0.70	ug/L			10/24/19 17:59	1
Styrene	ND		1.0	1.0	ug/L			10/24/19 17:59	1
tert-Butylbenzene	1.2		1.0	0.63	ug/L			10/24/19 17:59	1

Client Sample ID: MW22-ROX-101519
Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 17:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 17:59	1
Toluene	8.9		1.0	0.41	ug/L			10/24/19 17:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 17:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 17:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 17:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 17:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 17:59	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 17:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 17:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/19 17:59	1
1,3,5-Trimethylbenzene	20		1.0	0.56	ug/L			10/24/19 17:59	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 17:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*10/24/19 17:59*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*10/24/19 17:59*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/24/19 17:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	250		2.0	1.0	ug/L			10/25/19 18:39	2
m-Xylene & p-Xylene	160	J	10	3.2	ug/L			10/25/19 18:39	2
o-Xylene	14		10	1.2	ug/L			10/25/19 18:39	2
1,2,4-Trimethylbenzene	55	J	2.0	1.6	ug/L			10/25/19 18:39	2
Xylenes, Total	180	J	20	3.2	ug/L			10/25/19 18:39	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*10/25/19 18:39*	*2*
Dibromofluoromethane	*114*		*81 - 121*		*10/25/19 18:39*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/25/19 18:39*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 19:30	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:30	1

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		10/22/19 10:54	11/01/19 19:30	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1
1-Methylnaphthalene	2.2		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1
2-Methylnaphthalene	2.5		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*10/22/19 10:54*	*11/01/19 19:30*	*1*
2-Fluorobiphenyl	*81*		*15 - 122*	*10/22/19 10:54*	*11/01/19 19:30*	*1*
Nitrobenzene-d5	*86*		*19 - 130*	*10/22/19 10:54*	*11/01/19 19:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 12:59	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 12:59	1
Benzoic acid	ND		29	6.9	ug/L		10/22/19 10:54	11/03/19 12:59	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 12:59	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 12:59	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/22/19 10:54	11/03/19 12:59	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 12:59	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 12:59	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/22/19 10:54	11/03/19 12:59	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 12:59	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 12:59	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 12:59	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 12:59	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 12:59	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 12:59	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 12:59	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 12:59	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 12:59	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 12:59	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 12:59	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 12:59	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 12:59	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 12:59	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 12:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 12:59	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 12:59	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 12:59	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 12:59	1
Indene	2.1	J J	9.5	0.95	ug/L		10/22/19 10:54	11/03/19 12:59	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 12:59	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 12:59	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 12:59	1

Client Sample ID: MW22-ROX-101519
Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-5
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		10/22/19 10:54	11/03/19 12:59	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 12:59	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 12:59	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 12:59	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 12:59	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 12:59	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 12:59	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/22/19 10:54	11/03/19 12:59	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 12:59	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 12:59	1
Phenol	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 12:59	1
Pyridine	ND		9.5	3.0	ug/L		10/22/19 10:54	11/03/19 12:59	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 12:59	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*34 - 120*	*10/22/19 10:54*	*11/03/19 12:59*	*1*
2-Fluorophenol	*41*		*10 - 120*	*10/22/19 10:54*	*11/03/19 12:59*	*1*
Nitrobenzene-d5	*70*		*27 - 120*	*10/22/19 10:54*	*11/03/19 12:59*	*1*
Phenol-d5	*60*		*10 - 120*	*10/22/19 10:54*	*11/03/19 12:59*	*1*
Terphenyl-d14	*74*		*53 - 125*	*10/22/19 10:54*	*11/03/19 12:59*	*1*
2,4,6-Tribromophenol	*76*		*15 - 135*	*10/22/19 10:54*	*11/03/19 12:59*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/24/19 08:25	10/24/19 20:42	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/24/19 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*	*p*	*51 - 149*	*10/24/19 08:25*	*10/24/19 20:42*	*1*

Client Sample Results

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

Job ID: 400-178067-1

Client Sample ID: MW22-ROX-101519-DUP

Lab Sample ID: 400-178067-6

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	12	J	25	10	ug/L			10/24/19 18:21	1
Acrolein	ND		20	10	ug/L			10/24/19 18:21	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 18:21	1
Benzene	3.9		1.0	0.38	ug/L			10/24/19 18:21	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 18:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 18:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 18:21	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 18:21	1
2-Butanone (MEK)	4.2	J	25	2.6	ug/L			10/24/19 18:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 18:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/19 18:21	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 18:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 18:21	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 18:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 18:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 18:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 18:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 18:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 18:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 18:21	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 18:21	1
Isopropylbenzene	10		1.0	0.53	ug/L			10/24/19 18:21	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 18:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 18:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 18:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/24/19 18:21	1
m-Xylene & p-Xylene	290	J	5.0	1.6	ug/L			10/24/19 18:21	1
Naphthalene	32		1.0	1.0	ug/L			10/24/19 18:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 18:21	1
N-Propylbenzene	16	J	1.0	0.69	ug/L			10/24/19 18:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 18:21	1
o-Xylene	20		5.0	0.60	ug/L			10/24/19 18:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 18:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/19 18:21	1
sec-Butylbenzene	1.1		1.0	0.70	ug/L			10/24/19 18:21	1

Client Sample ID: MW22-ROX-101519-DUP

Lab Sample ID: 400-178067-6

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

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			10/24/19 18:21	1
tert-Butylbenzene	0.90	J	1.0	0.63	ug/L			10/24/19 18:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 18:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 18:21	1
Toluene	9.6		1.0	0.41	ug/L			10/24/19 18:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 18:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 18:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 18:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 18:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 18:21	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 18:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/19 18:21	1
1,3,5-Trimethylbenzene	17		1.0	0.56	ug/L			10/24/19 18:21	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 18:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 18:21	1
Xylenes, Total	310	J	10	1.6	ug/L			10/24/19 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*10/24/19 18:21*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*10/24/19 18:21*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/24/19 18:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	300		2.0	1.0	ug/L			10/27/19 17:11	2
1,2,4-Trimethylbenzene	71	J	2.0	1.6	ug/L			10/27/19 17:11	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/27/19 17:11*	*2*
Dibromofluoromethane	*110*		*81 - 121*		*10/27/19 17:11*	*2*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/27/19 17:11*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 19:47	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 19:47	1

Client Sample ID: MW22-ROX-101519-DUP

Lab Sample ID: 400-178067-6

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
1-Methylnaphthalene	1.9		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1
2-Methylnaphthalene	2.1		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*56*		*33 - 138*	*10/22/19 10:54*	*11/01/19 19:47*	*1*
2-Fluorobiphenyl	*75*		*15 - 122*	*10/22/19 10:54*	*11/01/19 19:47*	*1*
Nitrobenzene-d5	*81*		*19 - 130*	*10/22/19 10:54*	*11/01/19 19:47*	*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		10/22/19 10:54	11/03/19 13:23	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 13:23	1
Benzoic acid	ND		29	6.9	ug/L		10/22/19 10:54	11/03/19 13:23	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 13:23	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 13:23	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/22/19 10:54	11/03/19 13:23	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 13:23	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 13:23	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/22/19 10:54	11/03/19 13:23	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 13:23	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 13:23	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 13:23	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 13:23	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 13:23	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 13:23	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 13:23	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 13:23	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 13:23	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 13:23	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 13:23	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 13:23	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 13:23	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 13:23	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 13:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 13:23	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 13:23	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 13:23	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 13:23	1
Indene	2.3	J J	9.5	0.95	ug/L		10/22/19 10:54	11/03/19 13:23	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 13:23	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 13:23	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 13:23	1

Client Sample ID: MW22-ROX-101519-DUP

Lab Sample ID: 400-178067-6

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/03/19 13:23	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 13:23	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 13:23	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 13:23	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 13:23	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 13:23	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 13:23	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/22/19 10:54	11/03/19 13:23	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 13:23	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 13:23	1
Phenol	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 13:23	1
Pyridine	ND		9.5	3.0	ug/L		10/22/19 10:54	11/03/19 13:23	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 13:23	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*34 - 120*	*10/22/19 10:54*	*11/03/19 13:23*	*1*
2-Fluorophenol	*46*		*10 - 120*	*10/22/19 10:54*	*11/03/19 13:23*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*10/22/19 10:54*	*11/03/19 13:23*	*1*
Phenol-d5	*63*		*10 - 120*	*10/22/19 10:54*	*11/03/19 13:23*	*1*
Terphenyl-d14	*70*		*53 - 125*	*10/22/19 10:54*	*11/03/19 13:23*	*1*
2,4,6-Tribromophenol	*83*		*15 - 135*	*10/22/19 10:54*	*11/03/19 13:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/24/19 08:25	10/24/19 21:06	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		10/24/19 08:25	10/24/19 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*	*p*	*51 - 149*	*10/24/19 08:25*	*10/24/19 21:06*	*1*

Client Sample ID: P59-ROX-101519
Date Collected: 10/15/19 13:20
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-7
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			10/24/19 18:43	10
Acrolein	ND		200	100	ug/L			10/24/19 18:43	10
Acrylonitrile	ND		100	28	ug/L			10/24/19 18:43	10
Benzene	2100		10	3.8	ug/L			10/24/19 18:43	10
Bromobenzene	ND		10	5.4	ug/L			10/24/19 18:43	10
Bromochloromethane	ND		10	5.2	ug/L			10/24/19 18:43	10
Bromodichloromethane	ND		10	5.0	ug/L			10/24/19 18:43	10
Bromoform	ND		50	7.1	ug/L			10/24/19 18:43	10
Bromomethane	ND		10	9.8	ug/L			10/24/19 18:43	10
2-Butanone (MEK)	ND		250	26	ug/L			10/24/19 18:43	10
Carbon disulfide	ND		10	5.0	ug/L			10/24/19 18:43	10
Carbon tetrachloride	ND		10	5.0	ug/L			10/24/19 18:43	10
Chlorobenzene	ND		10	5.0	ug/L			10/24/19 18:43	10
Dibromochloromethane	ND		10	5.0	ug/L			10/24/19 18:43	10
Chloroethane	ND		10	7.6	ug/L			10/24/19 18:43	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			10/24/19 18:43	10
Chloroform	ND		10	6.0	ug/L			10/24/19 18:43	10
1-Chlorohexane	ND		10	7.0	ug/L			10/24/19 18:43	10
Chloromethane	ND		10	8.3	ug/L			10/24/19 18:43	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			10/24/19 18:43	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			10/24/19 18:43	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			10/24/19 18:43	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			10/24/19 18:43	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			10/24/19 18:43	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			10/24/19 18:43	10
1,1-Dichloroethane	ND		10	5.0	ug/L			10/24/19 18:43	10
1,2-Dichloroethane	ND		10	5.0	ug/L			10/24/19 18:43	10
1,1-Dichloroethene	ND		10	5.0	ug/L			10/24/19 18:43	10
1,2-Dichloropropane	ND		10	5.0	ug/L			10/24/19 18:43	10
1,3-Dichloropropane	ND		10	5.0	ug/L			10/24/19 18:43	10
2,2-Dichloropropane	ND		10	5.0	ug/L			10/24/19 18:43	10
1,1-Dichloropropene	ND		10	5.0	ug/L			10/24/19 18:43	10
Ethylbenzene	860		10	5.0	ug/L			10/24/19 18:43	10
Ethyl methacrylate	ND		10	6.0	ug/L			10/24/19 18:43	10
Hexachlorobutadiene	ND		50	9.0	ug/L			10/24/19 18:43	10
2-Hexanone	ND		250	31	ug/L			10/24/19 18:43	10
Isopropylbenzene	41		10	5.3	ug/L			10/24/19 18:43	10
Methylene bromide	ND		50	5.9	ug/L			10/24/19 18:43	10
Methylene Chloride	ND		50	30	ug/L			10/24/19 18:43	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			10/24/19 18:43	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			10/24/19 18:43	10
m-Xylene & p-Xylene	1300		50	16	ug/L			10/24/19 18:43	10
Naphthalene	150		10	10	ug/L			10/24/19 18:43	10
n-Butylbenzene	ND		10	7.6	ug/L			10/24/19 18:43	10
N-Propylbenzene	66		10	6.9	ug/L			10/24/19 18:43	10
o-Chlorotoluene	ND		10	5.7	ug/L			10/24/19 18:43	10
o-Xylene	170		50	6.0	ug/L			10/24/19 18:43	10
p-Chlorotoluene	ND		10	5.6	ug/L			10/24/19 18:43	10
p-Isopropyltoluene	ND		10	7.1	ug/L			10/24/19 18:43	10

Client Sample ID: P59-ROX-101519
Date Collected: 10/15/19 13:20
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			10/24/19 18:43	10
Styrene	ND		10	10	ug/L			10/24/19 18:43	10
tert-Butylbenzene	ND		10	6.3	ug/L			10/24/19 18:43	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			10/24/19 18:43	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			10/24/19 18:43	10
Tetrachloroethene	ND		10	5.8	ug/L			10/24/19 18:43	10
Toluene	740		10	4.1	ug/L			10/24/19 18:43	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			10/24/19 18:43	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			10/24/19 18:43	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			10/24/19 18:43	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			10/24/19 18:43	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			10/24/19 18:43	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			10/24/19 18:43	10
Trichloroethene	ND		10	5.0	ug/L			10/24/19 18:43	10
Trichlorofluoromethane	ND		10	5.2	ug/L			10/24/19 18:43	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			10/24/19 18:43	10
1,2,4-Trimethylbenzene	380		10	8.2	ug/L			10/24/19 18:43	10
1,3,5-Trimethylbenzene	90		10	5.6	ug/L			10/24/19 18:43	10
Vinyl acetate	ND		250	20	ug/L			10/24/19 18:43	10
Vinyl chloride	ND		10	5.0	ug/L			10/24/19 18:43	10
Xylenes, Total	1500		100	16	ug/L			10/24/19 18:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*10/24/19 18:43*	*10*
Dibromofluoromethane	*102*		*81 - 121*		*10/24/19 18:43*	*10*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/24/19 18:43*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 21:49	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:49	1
Phenanthrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
Pyrene	~~0.11~~	J B	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
1-Methylnaphthalene	13		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1
2-Methylnaphthalene	19		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*44*		*33 - 138*	*10/22/19 10:54*	*11/01/19 21:49*	*1*
2-Fluorobiphenyl	*55*		*15 - 122*	*10/22/19 10:54*	*11/01/19 21:49*	*1*

Client Sample ID: P59-ROX-101519
Date Collected: 10/15/19 13:20
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	75		19 - 130	10/22/19 10:54	11/01/19 21:49	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		10/22/19 10:54	11/03/19 13:48	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 13:48	1
Benzoic acid	ND		29	7.0	ug/L		10/22/19 10:54	11/03/19 13:48	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 13:48	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 13:48	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		10/22/19 10:54	11/03/19 13:48	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 13:48	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 13:48	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		10/22/19 10:54	11/03/19 13:48	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 13:48	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 13:48	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 13:48	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 13:48	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 13:48	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 13:48	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 13:48	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 13:48	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 13:48	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,4-Dimethylphenol	4.2	J	9.5	3.3	ug/L		10/22/19 10:54	11/03/19 13:48	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 13:48	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 13:48	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 13:48	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 13:48	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 13:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 13:48	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 13:48	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 13:48	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 13:48	1
Indene	6.1	J J	9.5	0.95	ug/L		10/22/19 10:54	11/03/19 13:48	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 13:48	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 13:48	1
3 & 4 Methylphenol	3.3	J	19	0.99	ug/L		10/22/19 10:54	11/03/19 13:48	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 13:48	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 13:48	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 13:48	1
Nitrobenzene	ND		9.5	0.53	ug/L		10/22/19 10:54	11/03/19 13:48	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 13:48	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 13:48	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 13:48	1

Client Sample ID: P59-ROX-101519

Lab Sample ID: 400-178067-7

Date Collected: 10/15/19 13:20
Date Received: 10/16/19 09:22

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	3.2	ug/L		10/22/19 10:54	11/03/19 13:48	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 13:48	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 13:48	1
Phenol	20		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 13:48	1
Pyridine	ND		9.5	3.1	ug/L		10/22/19 10:54	11/03/19 13:48	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 13:48	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*34 - 120*	*10/22/19 10:54*	*11/03/19 13:48*	*1*
2-Fluorophenol	*40*		*10 - 120*	*10/22/19 10:54*	*11/03/19 13:48*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*10/22/19 10:54*	*11/03/19 13:48*	*1*
Phenol-d5	*66*		*10 - 120*	*10/22/19 10:54*	*11/03/19 13:48*	*1*
Terphenyl-d14	*66*		*53 - 125*	*10/22/19 10:54*	*11/03/19 13:48*	*1*
2,4,6-Tribromophenol	*100*		*15 - 135*	*10/22/19 10:54*	*11/03/19 13:48*	*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	0.0054	ug/L		10/24/19 08:25	10/24/19 21:29	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/24/19 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*		*51 - 149*	*10/24/19 08:25*	*10/24/19 21:29*	*1*

Client Sample ID: P57-ROX-101519

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		500	200	ug/L			10/24/19 19:05	20
Acrolein	ND		400	200	ug/L			10/24/19 19:05	20
Acrylonitrile	ND		200	56	ug/L			10/24/19 19:05	20
Benzene	2300		20	7.6	ug/L			10/24/19 19:05	20
Bromobenzene	ND		20	11	ug/L			10/24/19 19:05	20
Bromochloromethane	ND		20	10	ug/L			10/24/19 19:05	20
Bromodichloromethane	ND		20	10	ug/L			10/24/19 19:05	20
Bromoform	ND		100	14	ug/L			10/24/19 19:05	20
Bromomethane	ND		20	20	ug/L			10/24/19 19:05	20
2-Butanone (MEK)	ND		500	52	ug/L			10/24/19 19:05	20
Carbon disulfide	ND		20	10	ug/L			10/24/19 19:05	20
Carbon tetrachloride	ND		20	10	ug/L			10/24/19 19:05	20
Chlorobenzene	ND		20	10	ug/L			10/24/19 19:05	20
Dibromochloromethane	ND		20	10	ug/L			10/24/19 19:05	20
Chloroethane	ND		20	15	ug/L			10/24/19 19:05	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			10/24/19 19:05	20
Chloroform	ND		20	12	ug/L			10/24/19 19:05	20
1-Chlorohexane	ND		20	14	ug/L			10/24/19 19:05	20
Chloromethane	ND		20	17	ug/L			10/24/19 19:05	20
cis-1,2-Dichloroethene	ND		20	10	ug/L			10/24/19 19:05	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			10/24/19 19:05	20
1,2-Dichlorobenzene	ND		20	10	ug/L			10/24/19 19:05	20
1,3-Dichlorobenzene	ND		20	11	ug/L			10/24/19 19:05	20
1,4-Dichlorobenzene	ND		20	13	ug/L			10/24/19 19:05	20
Dichlorodifluoromethane	ND		20	17	ug/L			10/24/19 19:05	20
1,1-Dichloroethane	ND		20	10	ug/L			10/24/19 19:05	20
1,2-Dichloroethane	ND		20	10	ug/L			10/24/19 19:05	20
1,1-Dichloroethene	ND		20	10	ug/L			10/24/19 19:05	20
1,2-Dichloropropane	ND		20	10	ug/L			10/24/19 19:05	20
1,3-Dichloropropane	ND		20	10	ug/L			10/24/19 19:05	20
2,2-Dichloropropane	ND		20	10	ug/L			10/24/19 19:05	20
1,1-Dichloropropene	ND		20	10	ug/L			10/24/19 19:05	20
Ethylbenzene	12	J	20	10	ug/L			10/24/19 19:05	20
Ethyl methacrylate	ND		20	12	ug/L			10/24/19 19:05	20
Hexachlorobutadiene	ND		100	18	ug/L			10/24/19 19:05	20
2-Hexanone	ND		500	62	ug/L			10/24/19 19:05	20
Isopropylbenzene	22		20	11	ug/L			10/24/19 19:05	20
Methylene bromide	ND		100	12	ug/L			10/24/19 19:05	20
Methylene Chloride	ND		100	60	ug/L			10/24/19 19:05	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			10/24/19 19:05	20
Methyl tert-butyl ether	ND		20	15	ug/L			10/24/19 19:05	20
m-Xylene & p-Xylene	ND		100	32	ug/L			10/24/19 19:05	20
Naphthalene	75		20	20	ug/L			10/24/19 19:05	20
n-Butylbenzene	ND		20	15	ug/L			10/24/19 19:05	20
N-Propylbenzene	25		20	14	ug/L			10/24/19 19:05	20
o-Chlorotoluene	ND		20	11	ug/L			10/24/19 19:05	20
o-Xylene	ND		100	12	ug/L			10/24/19 19:05	20
p-Chlorotoluene	ND		20	11	ug/L			10/24/19 19:05	20
p-Isopropyltoluene	ND		20	14	ug/L			10/24/19 19:05	20

Client Sample ID: P57-ROX-101519

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		20	14	ug/L			10/24/19 19:05	20
Styrene	ND		20	20	ug/L			10/24/19 19:05	20
tert-Butylbenzene	ND		20	13	ug/L			10/24/19 19:05	20
1,1,1,2-Tetrachloroethane	ND		20	10	ug/L			10/24/19 19:05	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			10/24/19 19:05	20
Tetrachloroethene	ND		20	12	ug/L			10/24/19 19:05	20
Toluene	14	J	20	8.2	ug/L			10/24/19 19:05	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			10/24/19 19:05	20
trans-1,3-Dichloropropene	ND		100	10	ug/L			10/24/19 19:05	20
1,2,3-Trichlorobenzene	ND		20	14	ug/L			10/24/19 19:05	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			10/24/19 19:05	20
1,1,1-Trichloroethane	ND		20	10	ug/L			10/24/19 19:05	20
1,1,2-Trichloroethane	ND		100	10	ug/L			10/24/19 19:05	20
Trichloroethene	ND		20	10	ug/L			10/24/19 19:05	20
Trichlorofluoromethane	ND		20	10	ug/L			10/24/19 19:05	20
1,2,3-Trichloropropane	ND		100	17	ug/L			10/24/19 19:05	20
1,2,4-Trimethylbenzene	ND		20	16	ug/L			10/24/19 19:05	20
1,3,5-Trimethylbenzene	ND		20	11	ug/L			10/24/19 19:05	20
Vinyl acetate	ND		500	40	ug/L			10/24/19 19:05	20
Vinyl chloride	ND		20	10	ug/L			10/24/19 19:05	20
Xylenes, Total	ND		200	32	ug/L			10/24/19 19:05	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*10/24/19 19:05*	*20*
Dibromofluoromethane	*108*		*81 - 121*		*10/24/19 19:05*	*20*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/24/19 19:05*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.22		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
Fluorene	0.37		0.19	0.020	ug/L		10/21/19 18:49	10/25/19 00:34	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:34	1
Phenanthrene	0.29		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
1-Methylnaphthalene	28		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1
2-Methylnaphthalene	30		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*33 - 138*	*10/21/19 18:49*	*10/25/19 00:34*	*1*
2-Fluorobiphenyl	*93*		*15 - 122*	*10/21/19 18:49*	*10/25/19 00:34*	*1*

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	109		19 - 130	10/21/19 18:49	10/25/19 00:34	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		10/21/19 18:49	10/24/19 23:26	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/21/19 18:49	10/24/19 23:26	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 18:49	10/24/19 23:26	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/21/19 18:49	10/24/19 23:26	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 18:49	10/24/19 23:26	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/21/19 18:49	10/24/19 23:26	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/21/19 18:49	10/24/19 23:26	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 18:49	10/24/19 23:26	1
4-Chloroaniline	16		9.5	3.2	ug/L		10/21/19 18:49	10/24/19 23:26	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 18:49	10/24/19 23:26	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/21/19 18:49	10/24/19 23:26	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 18:49	10/24/19 23:26	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 18:49	10/24/19 23:26	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/21/19 18:49	10/24/19 23:26	1
Dibenzofuran	0.66	J	9.5	0.49	ug/L		10/21/19 18:49	10/24/19 23:26	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 18:49	10/24/19 23:26	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 18:49	10/24/19 23:26	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 18:49	10/24/19 23:26	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 18:49	10/24/19 23:26	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 18:49	10/24/19 23:26	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 18:49	10/24/19 23:26	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 18:49	10/24/19 23:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 18:49	10/24/19 23:26	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 18:49	10/24/19 23:26	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 18:49	10/24/19 23:26	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 18:49	10/24/19 23:26	1
Indene	ND	UJ	9.5	0.95	ug/L		10/21/19 18:49	10/24/19 23:26	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 18:49	10/24/19 23:26	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 18:49	10/24/19 23:26	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 18:49	10/24/19 23:26	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 18:49	10/24/19 23:26	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 18:49	10/24/19 23:26	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 18:49	10/24/19 23:26	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 18:49	10/24/19 23:26	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 18:49	10/24/19 23:26	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 18:49	10/24/19 23:26	1
N-Nitrosodimethylamine	ND	UJ	9.5	3.3	ug/L		10/21/19 18:49	10/24/19 23:26	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/21/19 18:49	10/24/19 23:26	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 18:49	10/24/19 23:26	1

Client Sample ID: P57-ROX-101519

Lab Sample ID: 400-178067-8
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 18:49	10/24/19 23:26	1
Pyridine	ND		9.5	3.0	ug/L		10/21/19 18:49	10/24/19 23:26	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 18:49	10/24/19 23:26	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 18:49	10/24/19 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*34 - 120*	*10/21/19 18:49*	*10/24/19 23:26*	*1*
2-Fluorophenol	*77*		*10 - 120*	*10/21/19 18:49*	*10/24/19 23:26*	*1*
Nitrobenzene-d5	*87*		*27 - 120*	*10/21/19 18:49*	*10/24/19 23:26*	*1*
Phenol-d5	*83*		*10 - 120*	*10/21/19 18:49*	*10/24/19 23:26*	*1*
Terphenyl-d14	*71*		*53 - 125*	*10/21/19 18:49*	*10/24/19 23:26*	*1*
2,4,6-Tribromophenol	*96*		*15 - 135*	*10/21/19 18:49*	*10/24/19 23:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	79	*	48	12	ug/L		10/21/19 18:49	10/28/19 21:19	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	ND		29	6.9	ug/L		10/21/19 18:49	10/28/19 20:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND	UJ	9.5	1.6	ug/L		10/21/19 18:49	11/07/19 10:11	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.028	0.0052	ug/L		10/24/19 08:25	10/24/19 21:53	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		10/24/19 08:25	10/24/19 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*10/24/19 08:25*	*10/24/19 21:53*	*1*

Client Sample Results

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

Job ID: 400-178067-1

Client Sample ID: P57-ROX-101519-DUP

Lab Sample ID: 400-178067-9

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		500	200	ug/L			10/27/19 17:55	20
Acrolein	ND		400	200	ug/L			10/27/19 17:55	20
Acrylonitrile	ND		200	56	ug/L			10/27/19 17:55	20
Benzene	2300		20	7.6	ug/L			10/27/19 17:55	20
Bromobenzene	ND		20	11	ug/L			10/27/19 17:55	20
Bromochloromethane	ND		20	10	ug/L			10/27/19 17:55	20
Bromodichloromethane	ND		20	10	ug/L			10/27/19 17:55	20
Bromoform	ND		100	14	ug/L			10/27/19 17:55	20
Bromomethane	ND	*	20	20	ug/L			10/27/19 17:55	20
2-Butanone (MEK)	ND		500	52	ug/L			10/27/19 17:55	20
Carbon disulfide	ND		20	10	ug/L			10/27/19 17:55	20
Carbon tetrachloride	ND		20	10	ug/L			10/27/19 17:55	20
Chlorobenzene	ND		20	10	ug/L			10/27/19 17:55	20
Dibromochloromethane	ND		20	10	ug/L			10/27/19 17:55	20
Chloroethane	ND		20	15	ug/L			10/27/19 17:55	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			10/27/19 17:55	20
Chloroform	ND		20	12	ug/L			10/27/19 17:55	20
1-Chlorohexane	ND		20	14	ug/L			10/27/19 17:55	20
Chloromethane	ND		20	17	ug/L			10/27/19 17:55	20
cis-1,2-Dichloroethene	ND		20	10	ug/L			10/27/19 17:55	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			10/27/19 17:55	20
1,2-Dichlorobenzene	ND		20	10	ug/L			10/27/19 17:55	20
1,3-Dichlorobenzene	ND		20	11	ug/L			10/27/19 17:55	20
1,4-Dichlorobenzene	ND		20	13	ug/L			10/27/19 17:55	20
Dichlorodifluoromethane	ND		20	17	ug/L			10/27/19 17:55	20
1,1-Dichloroethane	ND		20	10	ug/L			10/27/19 17:55	20
1,2-Dichloroethane	ND		20	10	ug/L			10/27/19 17:55	20
1,1-Dichloroethene	ND		20	10	ug/L			10/27/19 17:55	20
1,2-Dichloropropane	ND		20	10	ug/L			10/27/19 17:55	20
1,3-Dichloropropane	ND		20	10	ug/L			10/27/19 17:55	20
2,2-Dichloropropane	ND		20	10	ug/L			10/27/19 17:55	20
1,1-Dichloropropene	ND		20	10	ug/L			10/27/19 17:55	20
Ethylbenzene	ND		20	10	ug/L			10/27/19 17:55	20
Ethyl methacrylate	ND		20	12	ug/L			10/27/19 17:55	20
Hexachlorobutadiene	ND		100	18	ug/L			10/27/19 17:55	20
2-Hexanone	ND		500	62	ug/L			10/27/19 17:55	20
Isopropylbenzene	33		20	11	ug/L			10/27/19 17:55	20
Methylene bromide	ND		100	12	ug/L			10/27/19 17:55	20
Methylene Chloride	ND		100	60	ug/L			10/27/19 17:55	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			10/27/19 17:55	20
Methyl tert-butyl ether	ND		20	15	ug/L			10/27/19 17:55	20
m-Xylene & p-Xylene	ND		100	32	ug/L			10/27/19 17:55	20
Naphthalene	67		20	20	ug/L			10/27/19 17:55	20
n-Butylbenzene	ND		20	15	ug/L			10/27/19 17:55	20
N-Propylbenzene	20		20	14	ug/L			10/27/19 17:55	20
o-Chlorotoluene	ND		20	11	ug/L			10/27/19 17:55	20
o-Xylene	ND		100	12	ug/L			10/27/19 17:55	20
p-Chlorotoluene	ND		20	11	ug/L			10/27/19 17:55	20
p-Isopropyltoluene	ND		20	14	ug/L			10/27/19 17:55	20

Client Sample ID: P57-ROX-101519-DUP

Lab Sample ID: 400-178067-9
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		20	14	ug/L			10/27/19 17:55	20
Styrene	ND		20	20	ug/L			10/27/19 17:55	20
tert-Butylbenzene	ND		20	13	ug/L			10/27/19 17:55	20
1,1,1,2-Tetrachloroethane	ND		20	10	ug/L			10/27/19 17:55	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			10/27/19 17:55	20
Tetrachloroethene	ND		20	12	ug/L			10/27/19 17:55	20
Toluene	ND		20	8.2	ug/L			10/27/19 17:55	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			10/27/19 17:55	20
trans-1,3-Dichloropropene	ND		100	10	ug/L			10/27/19 17:55	20
1,2,3-Trichlorobenzene	ND		20	14	ug/L			10/27/19 17:55	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			10/27/19 17:55	20
1,1,1-Trichloroethane	ND		20	10	ug/L			10/27/19 17:55	20
1,1,2-Trichloroethane	ND		100	10	ug/L			10/27/19 17:55	20
Trichloroethene	ND		20	10	ug/L			10/27/19 17:55	20
Trichlorofluoromethane	ND	*	20	10	ug/L			10/27/19 17:55	20
1,2,3-Trichloropropane	ND		100	17	ug/L			10/27/19 17:55	20
1,2,4-Trimethylbenzene	ND		20	16	ug/L			10/27/19 17:55	20
1,3,5-Trimethylbenzene	ND		20	11	ug/L			10/27/19 17:55	20
Vinyl acetate	ND		500	40	ug/L			10/27/19 17:55	20
Vinyl chloride	ND		20	10	ug/L			10/27/19 17:55	20
Xylenes, Total	ND		200	32	ug/L			10/27/19 17:55	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*78 - 118*		*10/27/19 17:55*	*20*
Dibromofluoromethane	*110*		*81 - 121*		*10/27/19 17:55*	*20*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/27/19 17:55*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.13	J	0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
Fluorene	0.39		0.19	0.020	ug/L		10/21/19 18:49	10/25/19 00:50	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 18:49	10/25/19 00:50	1
Phenanthrene	0.25		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
1-Methylnaphthalene	24		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1
2-Methylnaphthalene	26		0.19	0.019	ug/L		10/21/19 18:49	10/25/19 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*33 - 138*	*10/21/19 18:49*	*10/25/19 00:50*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*10/21/19 18:49*	*10/25/19 00:50*	*1*

Client Sample ID: P57-ROX-101519-DUP

Lab Sample ID: 400-178067-9
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	94		19 - 130	10/21/19 18:49	10/25/19 00:50	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		10/21/19 18:49	10/24/19 23:00	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/21/19 18:49	10/24/19 23:00	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/21/19 18:49	10/24/19 23:00	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/21/19 18:49	10/24/19 23:00	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		10/21/19 18:49	10/24/19 23:00	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		10/21/19 18:49	10/24/19 23:00	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/21/19 18:49	10/24/19 23:00	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/21/19 18:49	10/24/19 23:00	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/21/19 18:49	10/24/19 23:00	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/21/19 18:49	10/24/19 23:00	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/21/19 18:49	10/24/19 23:00	1
2-Chlorophenol	ND	*	9.6	2.1	ug/L		10/21/19 18:49	10/24/19 23:00	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/21/19 18:49	10/24/19 23:00	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/21/19 18:49	10/24/19 23:00	1
Dibenzofuran	0.56	J	9.6	0.50	ug/L		10/21/19 18:49	10/24/19 23:00	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/21/19 18:49	10/24/19 23:00	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		10/21/19 18:49	10/24/19 23:00	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/21/19 18:49	10/24/19 23:00	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/21/19 18:49	10/24/19 23:00	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/21/19 18:49	10/24/19 23:00	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/21/19 18:49	10/24/19 23:00	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/21/19 18:49	10/24/19 23:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/21/19 18:49	10/24/19 23:00	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/21/19 18:49	10/24/19 23:00	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 18:49	10/24/19 23:00	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/21/19 18:49	10/24/19 23:00	1
Indene	ND	UJ	9.6	0.96	ug/L		10/21/19 18:49	10/24/19 23:00	1
Isophorone	ND		9.6	0.55	ug/L		10/21/19 18:49	10/24/19 23:00	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/21/19 18:49	10/24/19 23:00	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 18:49	10/24/19 23:00	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/21/19 18:49	10/24/19 23:00	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/21/19 18:49	10/24/19 23:00	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/21/19 18:49	10/24/19 23:00	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/21/19 18:49	10/24/19 23:00	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/21/19 18:49	10/24/19 23:00	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/21/19 18:49	10/24/19 23:00	1
N-Nitrosodimethylamine	ND	UJ	9.6	3.3	ug/L		10/21/19 18:49	10/24/19 23:00	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		10/21/19 18:49	10/24/19 23:00	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/21/19 18:49	10/24/19 23:00	1

Client Sample ID: P57-ROX-101519-DUP

Lab Sample ID: 400-178067-9
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 18:49	10/24/19 23:00	1
Pyridine	ND		9.6	3.1	ug/L		10/21/19 18:49	10/24/19 23:00	1
Quinoline	ND		9.6	5.7	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/21/19 18:49	10/24/19 23:00	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		10/21/19 18:49	10/24/19 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*10/21/19 18:49*	*10/24/19 23:00*	*1*
2-Fluorophenol	*50*		*10 - 120*	*10/21/19 18:49*	*10/24/19 23:00*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*10/21/19 18:49*	*10/24/19 23:00*	*1*
Phenol-d5	*70*		*10 - 120*	*10/21/19 18:49*	*10/24/19 23:00*	*1*
Terphenyl-d14	*83*		*53 - 125*	*10/21/19 18:49*	*10/24/19 23:00*	*1*
2,4,6-Tribromophenol	*83*		*15 - 135*	*10/21/19 18:49*	*10/24/19 23:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	71	*	48	12	ug/L		10/21/19 18:49	10/28/19 22:10	5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	ND		29	7.0	ug/L		10/21/19 18:49	10/28/19 21:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND	UJ	9.6	1.6	ug/L		10/21/19 18:49	11/07/19 10:33	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		10/24/19 08:25	10/24/19 22:17	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/24/19 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*10/24/19 08:25*	*10/24/19 22:17*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: TB-ROX-101519-8011-SS
Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-10
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		0.029	0.0054	ug/L		10/24/19 08:25	10/24/19 23:04	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/24/19 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*144*		*51 - 149*	*10/24/19 08:25*	*10/24/19 23:04*	*1*

Client Sample ID: TB-ROX-101519-8260-SS

Lab Sample ID: 400-178067-11

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

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			10/23/19 12:22	1
Acrolein	ND		20	10	ug/L			10/23/19 12:22	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 12:22	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 12:22	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 12:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 12:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 12:22	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 12:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 12:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 12:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 12:22	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 12:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 12:22	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 12:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 12:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 12:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 12:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 12:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 12:22	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 12:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 12:22	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 12:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 12:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 12:22	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 12:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 12:22	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 12:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 12:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 12:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 12:22	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 12:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 12:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 12:22	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: TB-ROX-101519-8260-SS
Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-11
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			10/23/19 12:22	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 12:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 12:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 12:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 12:22	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 12:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 12:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 12:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 12:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 12:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 12:22	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 12:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 12:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 12:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 12:22	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 12:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 12:22	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*10/23/19 12:22*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*10/23/19 12:22*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/23/19 12:22*	*1*

Client Sample ID: P56-ROX-101519
Date Collected: 10/15/19 09:45
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	21	J	25	10	ug/L			10/23/19 14:33	1
Acrolein	ND		20	10	ug/L			10/23/19 14:33	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 14:33	1
Benzene	2.1		1.0	0.38	ug/L			10/23/19 14:33	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 14:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 14:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 14:33	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 14:33	1
2-Butanone (MEK)	6.9	J	25	2.6	ug/L			10/23/19 14:33	1
Carbon disulfide	0.95	J	1.0	0.50	ug/L			10/23/19 14:33	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 14:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 14:33	1
Chloroform	2.9		1.0	0.60	ug/L			10/23/19 14:33	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 14:33	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 14:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 14:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Ethylbenzene	21		1.0	0.50	ug/L			10/23/19 14:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 14:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 14:33	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 14:33	1
Isopropylbenzene	19		1.0	0.53	ug/L			10/23/19 14:33	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 14:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 14:33	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 14:33	1
m-Xylene & p-Xylene	75		5.0	1.6	ug/L			10/23/19 14:33	1
Naphthalene	13		1.0	1.0	ug/L			10/23/19 14:33	1
n-Butylbenzene	3.6		1.0	0.76	ug/L			10/23/19 14:33	1
N-Propylbenzene	24		1.0	0.69	ug/L			10/23/19 14:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 14:33	1
o-Xylene	2.9	J	5.0	0.60	ug/L			10/23/19 14:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 14:33	1
p-Isopropyltoluene	1.1		1.0	0.71	ug/L			10/23/19 14:33	1

Client Sample ID: P56-ROX-101519

Lab Sample ID: 400-178067-12
Matrix: Water

Date Collected: 10/15/19 09:45
Date Received: 10/16/19 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	2.2		1.0	0.70	ug/L			10/23/19 14:33	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 14:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 14:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 14:33	1
Toluene	2.5		1.0	0.41	ug/L			10/23/19 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 14:33	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:33	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 14:33	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 14:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 14:33	1
1,2,4-Trimethylbenzene	29		1.0	0.82	ug/L			10/23/19 14:33	1
1,3,5-Trimethylbenzene	7.2		1.0	0.56	ug/L			10/23/19 14:33	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 14:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 14:33	1
Xylenes, Total	78		10	1.6	ug/L			10/23/19 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*78 - 118*		*10/23/19 14:33*	*1*
Dibromofluoromethane	*97*		*81 - 121*		*10/23/19 14:33*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*10/23/19 14:33*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.41		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 21:14	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:14	1
Phenanthrene	0.98	B	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
1-Methylnaphthalene	19		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1
2-Methylnaphthalene	20		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*33*		*33 - 138*	*10/22/19 10:54*	*11/01/19 21:14*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*10/22/19 10:54*	*11/01/19 21:14*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	179	X	19 - 130	10/22/19 10:54	11/01/19 21:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 14:13	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 14:13	1
Benzoic acid	ND		29	6.9	ug/L		10/22/19 10:54	11/03/19 14:13	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 14:13	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 14:13	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/22/19 10:54	11/03/19 14:13	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 14:13	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 14:13	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/22/19 10:54	11/03/19 14:13	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 14:13	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 14:13	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 14:13	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 14:13	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 14:13	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 14:13	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 14:13	1
Dibenzofuran	0.57	J	9.5	0.49	ug/L		10/22/19 10:54	11/03/19 14:13	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 14:13	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 14:13	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 14:13	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 14:13	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 14:13	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 14:13	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 14:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 14:13	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 14:13	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 14:13	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 14:13	1
Indene	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 14:13	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 14:13	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 14:13	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 14:13	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 14:13	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 14:13	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 14:13	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 14:13	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 14:13	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 14:13	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 14:13	1

Client Sample ID: P56-ROX-101519

Lab Sample ID: 400-178067-12

Date Collected: 10/15/19 09:45
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/03/19 14:13	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 14:13	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 14:13	1
Phenol	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 14:13	1
Pyridine	ND		9.5	3.0	ug/L		10/22/19 10:54	11/03/19 14:13	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 14:13	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*34 - 120*	*10/22/19 10:54*	*11/03/19 14:13*	*1*
2-Fluorophenol	*17*		*10 - 120*	*10/22/19 10:54*	*11/03/19 14:13*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*10/22/19 10:54*	*11/03/19 14:13*	*1*
Phenol-d5	*46*		*10 - 120*	*10/22/19 10:54*	*11/03/19 14:13*	*1*
Terphenyl-d14	*44*	*X*	*53 - 125*	*10/22/19 10:54*	*11/03/19 14:13*	*1*
2,4,6-Tribromophenol	*95*		*15 - 135*	*10/22/19 10:54*	*11/03/19 14:13*	*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	0.0054	ug/L		10/24/19 08:25	10/24/19 23:27	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/24/19 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*10/24/19 08:25*	*10/24/19 23:27*	*1*

Client Sample ID: T12-ROX-101519
Date Collected: 10/15/19 10:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			10/23/19 15:17	10
Acrolein	ND		200	100	ug/L			10/23/19 15:17	10
Acrylonitrile	ND		100	28	ug/L			10/23/19 15:17	10
Benzene	2600		10	3.8	ug/L			10/23/19 15:17	10
Bromobenzene	ND		10	5.4	ug/L			10/23/19 15:17	10
Bromochloromethane	ND		10	5.2	ug/L			10/23/19 15:17	10
Bromodichloromethane	ND		10	5.0	ug/L			10/23/19 15:17	10
Bromoform	ND		50	7.1	ug/L			10/23/19 15:17	10
Bromomethane	ND		10	9.8	ug/L			10/23/19 15:17	10
2-Butanone (MEK)	ND		250	26	ug/L			10/23/19 15:17	10
Carbon disulfide	ND		10	5.0	ug/L			10/23/19 15:17	10
Carbon tetrachloride	ND		10	5.0	ug/L			10/23/19 15:17	10
Chlorobenzene	ND		10	5.0	ug/L			10/23/19 15:17	10
Dibromochloromethane	ND		10	5.0	ug/L			10/23/19 15:17	10
Chloroethane	ND		10	7.6	ug/L			10/23/19 15:17	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			10/23/19 15:17	10
Chloroform	ND		10	6.0	ug/L			10/23/19 15:17	10
1-Chlorohexane	ND		10	7.0	ug/L			10/23/19 15:17	10
Chloromethane	ND		10	8.3	ug/L			10/23/19 15:17	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			10/23/19 15:17	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			10/23/19 15:17	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			10/23/19 15:17	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			10/23/19 15:17	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			10/23/19 15:17	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			10/23/19 15:17	10
1,1-Dichloroethane	ND		10	5.0	ug/L			10/23/19 15:17	10
1,2-Dichloroethane	ND		10	5.0	ug/L			10/23/19 15:17	10
1,1-Dichloroethene	ND		10	5.0	ug/L			10/23/19 15:17	10
1,2-Dichloropropane	ND		10	5.0	ug/L			10/23/19 15:17	10
1,3-Dichloropropane	ND		10	5.0	ug/L			10/23/19 15:17	10
2,2-Dichloropropane	ND		10	5.0	ug/L			10/23/19 15:17	10
1,1-Dichloropropene	ND		10	5.0	ug/L			10/23/19 15:17	10
Ethylbenzene	25		10	5.0	ug/L			10/23/19 15:17	10
Ethyl methacrylate	ND		10	6.0	ug/L			10/23/19 15:17	10
Hexachlorobutadiene	ND		50	9.0	ug/L			10/23/19 15:17	10
2-Hexanone	ND		250	31	ug/L			10/23/19 15:17	10
Isopropylbenzene	14		10	5.3	ug/L			10/23/19 15:17	10
Methylene bromide	ND		50	5.9	ug/L			10/23/19 15:17	10
Methylene Chloride	ND		50	30	ug/L			10/23/19 15:17	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			10/23/19 15:17	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			10/23/19 15:17	10
m-Xylene & p-Xylene	150		50	16	ug/L			10/23/19 15:17	10
Naphthalene	43		10	10	ug/L			10/23/19 15:17	10
n-Butylbenzene	ND		10	7.6	ug/L			10/23/19 15:17	10
N-Propylbenzene	18		10	6.9	ug/L			10/23/19 15:17	10
o-Chlorotoluene	ND		10	5.7	ug/L			10/23/19 15:17	10
o-Xylene	10	J	50	6.0	ug/L			10/23/19 15:17	10
p-Chlorotoluene	ND		10	5.6	ug/L			10/23/19 15:17	10
p-Isopropyltoluene	ND		10	7.1	ug/L			10/23/19 15:17	10

Client Sample ID: T12-ROX-101519
Date Collected: 10/15/19 10:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			10/23/19 15:17	10
Styrene	ND		10	10	ug/L			10/23/19 15:17	10
tert-Butylbenzene	ND		10	6.3	ug/L			10/23/19 15:17	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			10/23/19 15:17	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			10/23/19 15:17	10
Tetrachloroethene	ND		10	5.8	ug/L			10/23/19 15:17	10
Toluene	65		10	4.1	ug/L			10/23/19 15:17	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			10/23/19 15:17	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			10/23/19 15:17	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			10/23/19 15:17	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			10/23/19 15:17	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			10/23/19 15:17	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			10/23/19 15:17	10
Trichloroethene	ND		10	5.0	ug/L			10/23/19 15:17	10
Trichlorofluoromethane	ND		10	5.2	ug/L			10/23/19 15:17	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			10/23/19 15:17	10
1,2,4-Trimethylbenzene	16		10	8.2	ug/L			10/23/19 15:17	10
1,3,5-Trimethylbenzene	8.0	J	10	5.6	ug/L			10/23/19 15:17	10
Vinyl acetate	ND		250	20	ug/L			10/23/19 15:17	10
Vinyl chloride	ND		10	5.0	ug/L			10/23/19 15:17	10
Xylenes, Total	160		100	16	ug/L			10/23/19 15:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 15:17*	*10*
Dibromofluoromethane	*101*		*81 - 121*		*10/23/19 15:17*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/19 15:17*	*10*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.22		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 20:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:22	1
Phenanthrene	0.50	B	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
1-Methylnaphthalene	18		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1
2-Methylnaphthalene	26		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*50*		*33 - 138*	*10/22/19 10:54*	*11/01/19 20:22*	*1*
2-Fluorobiphenyl	*59*		*15 - 122*	*10/22/19 10:54*	*11/01/19 20:22*	*1*

Client Sample ID: T12-ROX-101519
Date Collected: 10/15/19 10:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	76		19 - 130	10/22/19 10:54	11/01/19 20:22	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		10/22/19 10:54	11/03/19 14:37	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 14:37	1
Benzoic acid	ND		29	7.0	ug/L		10/22/19 10:54	11/03/19 14:37	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 14:37	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 14:37	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/22/19 10:54	11/03/19 14:37	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 14:37	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 14:37	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/22/19 10:54	11/03/19 14:37	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 14:37	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 14:37	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 14:37	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 14:37	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 14:37	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 14:37	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 14:37	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 14:37	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 14:37	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 14:37	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 14:37	1
Di-n-butyl phthalate	5.3	J	9.5	2.6	ug/L		10/22/19 10:54	11/03/19 14:37	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 14:37	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 14:37	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 14:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 14:37	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 14:37	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 14:37	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 14:37	1
Indene	1.5	J J	9.5	0.95	ug/L		10/22/19 10:54	11/03/19 14:37	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 14:37	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 14:37	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 14:37	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 14:37	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 14:37	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 14:37	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 14:37	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 14:37	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 14:37	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 14:37	1

Client Sample ID: T12-ROX-101519
Date Collected: 10/15/19 10:35
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-13
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		9.5	3.1	ug/L		10/22/19 10:54	11/03/19 14:37	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 14:37	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 14:37	1
Phenol	63		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 14:37	1
Pyridine	ND		9.5	3.0	ug/L		10/22/19 10:54	11/03/19 14:37	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 14:37	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*34 - 120*	*10/22/19 10:54*	*11/03/19 14:37*	*1*
2-Fluorophenol	*58*		*10 - 120*	*10/22/19 10:54*	*11/03/19 14:37*	*1*
Nitrobenzene-d5	*95*		*27 - 120*	*10/22/19 10:54*	*11/03/19 14:37*	*1*
Phenol-d5	*77*		*10 - 120*	*10/22/19 10:54*	*11/03/19 14:37*	*1*
Terphenyl-d14	*81*		*53 - 125*	*10/22/19 10:54*	*11/03/19 14:37*	*1*
2,4,6-Tribromophenol	*99*		*15 - 135*	*10/22/19 10:54*	*11/03/19 14:37*	*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	0.0056	ug/L		10/24/19 08:25	10/24/19 23:51	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		10/24/19 08:25	10/24/19 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*56*		*51 - 149*	*10/24/19 08:25*	*10/24/19 23:51*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: P93A-ROX-101519-EB

Lab Sample ID: 400-178067-14

Date Collected: 10/15/19 12:10
Date Received: 10/16/19 09:22

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			10/23/19 13:05	1
Acrolein	ND		20	10	ug/L			10/23/19 13:05	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 13:05	1
Benzene	0.73	J	1.0	0.38	ug/L			10/23/19 13:05	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 13:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 13:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 13:05	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 13:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 13:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 13:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 13:05	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 13:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 13:05	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 13:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 13:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 13:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 13:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 13:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 13:05	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 13:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 13:05	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 13:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 13:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 13:05	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 13:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 13:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 13:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 13:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 13:05	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 13:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 13:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 13:05	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 13:05	1

Client Sample ID: P93A-ROX-101519-EB

Lab Sample ID: 400-178067-14

Date Collected: 10/15/19 12:10
Date Received: 10/16/19 09:22

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			10/23/19 13:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 13:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 13:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 13:05	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 13:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 13:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 13:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 13:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 13:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 13:05	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 13:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 13:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 13:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 13:05	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 13:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 13:05	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*10/23/19 13:05*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*10/23/19 13:05*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 13:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 16:09	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
Anthracene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Fluoranthene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
Fluorene	ND		0.19	0.020	ug/L		10/21/19 18:51	10/25/19 01:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 18:51	10/25/19 01:06	1
Phenanthrene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
Pyrene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/21/19 18:51	10/25/19 01:06	1

Client Sample ID: P93A-ROX-101519-EB

Lab Sample ID: 400-178067-14
Matrix: Water

Date Collected: 10/15/19 12:10
Date Received: 10/16/19 09:22

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	127		33 - 138	10/21/19 18:51	10/25/19 01:06	1
2-Fluorobiphenyl	98		15 - 122	10/21/19 18:51	10/25/19 01:06	1
Nitrobenzene-d5	114		19 - 130	10/21/19 18:51	10/25/19 01:06	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		10/21/19 18:51	10/24/19 22:35	1
Benzyl alcohol	ND		9.5	1.9	ug/L		10/21/19 18:51	10/24/19 22:35	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 18:51	10/24/19 22:35	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/21/19 18:51	10/24/19 22:35	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 18:51	10/24/19 22:35	1
Bis(2-ethylhexyl) phthalate	14		9.5	4.8	ug/L		10/21/19 18:51	10/24/19 22:35	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/21/19 18:51	10/24/19 22:35	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 18:51	10/24/19 22:35	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/21/19 18:51	10/24/19 22:35	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 18:51	10/24/19 22:35	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/21/19 18:51	10/24/19 22:35	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 18:51	10/24/19 22:35	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 18:51	10/24/19 22:35	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/21/19 18:51	10/24/19 22:35	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/21/19 18:51	10/24/19 22:35	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/21/19 18:51	10/24/19 22:35	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 18:51	10/24/19 22:35	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 18:51	10/24/19 22:35	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 18:51	10/24/19 22:35	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 18:51	10/24/19 22:35	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 18:51	10/24/19 22:35	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 18:51	10/24/19 22:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 18:51	10/24/19 22:35	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 18:51	10/24/19 22:35	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 18:51	10/24/19 22:35	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 18:51	10/24/19 22:35	1
Indene	ND		9.5	0.95	ug/L		10/21/19 18:51	10/24/19 22:35	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 18:51	10/24/19 22:35	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 18:51	10/24/19 22:35	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 18:51	10/24/19 22:35	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 18:51	10/24/19 22:35	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 18:51	10/24/19 22:35	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 18:51	10/24/19 22:35	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 18:51	10/24/19 22:35	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 18:51	10/24/19 22:35	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 18:51	10/24/19 22:35	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/21/19 18:51	10/24/19 22:35	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/21/19 18:51	10/24/19 22:35	1

Client Sample ID: P93A-ROX-101519-EB

Lab Sample ID: 400-178067-14

Date Collected: 10/15/19 12:10
Date Received: 10/16/19 09:22

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 18:51	10/24/19 22:35	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 18:51	10/24/19 22:35	1
Phenol	ND	*	9.5	2.5	ug/L		10/21/19 18:51	10/24/19 22:35	1
Pyridine	ND		9.5	3.0	ug/L		10/21/19 18:51	10/24/19 22:35	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 18:51	10/24/19 22:35	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 18:51	10/24/19 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*10/21/19 18:51*	*10/24/19 22:35*	*1*
2-Fluorophenol	*49*		*10 - 120*	*10/21/19 18:51*	*10/24/19 22:35*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*10/21/19 18:51*	*10/24/19 22:35*	*1*
Phenol-d5	*58*		*10 - 120*	*10/21/19 18:51*	*10/24/19 22:35*	*1*
Terphenyl-d14	*81*		*53 - 125*	*10/21/19 18:51*	*10/24/19 22:35*	*1*
2,4,6-Tribromophenol	*59*		*15 - 135*	*10/21/19 18:51*	*10/24/19 22:35*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	ND		29	6.9	ug/L		10/21/19 18:51	10/28/19 22:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND		9.5	1.6	ug/L		10/21/19 18:51	11/07/19 10:55	1

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		10/24/19 08:25	10/25/19 00:14	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/25/19 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*10/24/19 08:25*	*10/25/19 00:14*	*1*

Client Sample ID: P93A-ROX-101519

Lab Sample ID: 400-178067-15

Date Collected: 10/15/19 12:55
Date Received: 10/16/19 09:22

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1300	500	ug/L			10/23/19 15:39	50
Acrolein	ND		1000	500	ug/L			10/23/19 15:39	50
Acrylonitrile	ND		500	140	ug/L			10/23/19 15:39	50
Bromobenzene	ND		50	27	ug/L			10/23/19 15:39	50
Bromochloromethane	ND		50	26	ug/L			10/23/19 15:39	50
Bromodichloromethane	ND		50	25	ug/L			10/23/19 15:39	50
Bromoform	ND		250	36	ug/L			10/23/19 15:39	50
Bromomethane	ND		50	49	ug/L			10/23/19 15:39	50
2-Butanone (MEK)	ND		1300	130	ug/L			10/23/19 15:39	50
Carbon disulfide	25	J	50	25	ug/L			10/23/19 15:39	50
Carbon tetrachloride	ND		50	25	ug/L			10/23/19 15:39	50
Chlorobenzene	ND		50	25	ug/L			10/23/19 15:39	50
Dibromochloromethane	ND		50	25	ug/L			10/23/19 15:39	50
Chloroethane	ND		50	38	ug/L			10/23/19 15:39	50
2-Chloroethyl vinyl ether	ND		250	100	ug/L			10/23/19 15:39	50
Chloroform	ND		50	30	ug/L			10/23/19 15:39	50
1-Chlorohexane	ND		50	35	ug/L			10/23/19 15:39	50
Chloromethane	ND		50	42	ug/L			10/23/19 15:39	50
cis-1,2-Dichloroethene	ND		50	25	ug/L			10/23/19 15:39	50
cis-1,3-Dichloropropene	ND		250	25	ug/L			10/23/19 15:39	50
1,2-Dichlorobenzene	ND		50	25	ug/L			10/23/19 15:39	50
1,3-Dichlorobenzene	ND		50	27	ug/L			10/23/19 15:39	50
1,4-Dichlorobenzene	ND		50	32	ug/L			10/23/19 15:39	50
Dichlorodifluoromethane	ND		50	43	ug/L			10/23/19 15:39	50
1,1-Dichloroethane	ND		50	25	ug/L			10/23/19 15:39	50
1,2-Dichloroethane	ND		50	25	ug/L			10/23/19 15:39	50
1,1-Dichloroethene	ND		50	25	ug/L			10/23/19 15:39	50
1,2-Dichloropropane	ND		50	25	ug/L			10/23/19 15:39	50
1,3-Dichloropropane	ND		50	25	ug/L			10/23/19 15:39	50
2,2-Dichloropropane	ND		50	25	ug/L			10/23/19 15:39	50
1,1-Dichloropropene	ND		50	25	ug/L			10/23/19 15:39	50
Ethylbenzene	ND		50	25	ug/L			10/23/19 15:39	50
Ethyl methacrylate	ND		50	30	ug/L			10/23/19 15:39	50
Hexachlorobutadiene	ND		250	45	ug/L			10/23/19 15:39	50
2-Hexanone	ND		1300	160	ug/L			10/23/19 15:39	50
Isopropylbenzene	ND		50	27	ug/L			10/23/19 15:39	50
Methylene bromide	ND		250	30	ug/L			10/23/19 15:39	50
Methylene Chloride	ND		250	150	ug/L			10/23/19 15:39	50
4-Methyl-2-pentanone (MIBK)	ND		1300	90	ug/L			10/23/19 15:39	50
Methyl tert-butyl ether	ND		50	37	ug/L			10/23/19 15:39	50
m-Xylene & p-Xylene	ND		250	80	ug/L			10/23/19 15:39	50
Naphthalene	ND		50	50	ug/L			10/23/19 15:39	50
n-Butylbenzene	ND		50	38	ug/L			10/23/19 15:39	50
N-Propylbenzene	ND		50	35	ug/L			10/23/19 15:39	50
o-Chlorotoluene	ND		50	29	ug/L			10/23/19 15:39	50
o-Xylene	ND		250	30	ug/L			10/23/19 15:39	50
p-Chlorotoluene	ND		50	28	ug/L			10/23/19 15:39	50
p-Isopropyltoluene	ND		50	36	ug/L			10/23/19 15:39	50
sec-Butylbenzene	ND		50	35	ug/L			10/23/19 15:39	50

Client Sample ID: P93A-ROX-101519

Date Collected: 10/15/19 12:55
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		50	50	ug/L			10/23/19 15:39	50
tert-Butylbenzene	ND		50	32	ug/L			10/23/19 15:39	50
1,1,1,2-Tetrachloroethane	ND		50	26	ug/L			10/23/19 15:39	50
1,1,2,2-Tetrachloroethane	ND		50	25	ug/L			10/23/19 15:39	50
Tetrachloroethene	ND		50	29	ug/L			10/23/19 15:39	50
Toluene	ND		50	21	ug/L			10/23/19 15:39	50
trans-1,2-Dichloroethene	ND		50	25	ug/L			10/23/19 15:39	50
trans-1,3-Dichloropropene	ND		250	25	ug/L			10/23/19 15:39	50
1,2,3-Trichlorobenzene	ND		50	35	ug/L			10/23/19 15:39	50
1,2,4-Trichlorobenzene	ND		50	41	ug/L			10/23/19 15:39	50
1,1,1-Trichloroethane	ND		50	25	ug/L			10/23/19 15:39	50
1,1,2-Trichloroethane	ND		250	25	ug/L			10/23/19 15:39	50
Trichloroethene	ND		50	25	ug/L			10/23/19 15:39	50
Trichlorofluoromethane	ND		50	26	ug/L			10/23/19 15:39	50
1,2,3-Trichloropropane	ND		250	42	ug/L			10/23/19 15:39	50
1,2,4-Trimethylbenzene	ND		50	41	ug/L			10/23/19 15:39	50
1,3,5-Trimethylbenzene	ND		50	28	ug/L			10/23/19 15:39	50
Vinyl acetate	ND		1300	100	ug/L			10/23/19 15:39	50
Vinyl chloride	ND		50	25	ug/L			10/23/19 15:39	50
Xylenes, Total	ND		500	80	ug/L			10/23/19 15:39	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*10/23/19 15:39*	*50*
Dibromofluoromethane	*104*		*81 - 121*		*10/23/19 15:39*	*50*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/23/19 15:39*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	220000		1000	380	ug/L			10/24/19 19:49	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*10/24/19 19:49*	*1000*
Dibromofluoromethane	*104*		*81 - 121*		*10/24/19 19:49*	*1000*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/24/19 19:49*	*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		10/22/19 10:54	11/01/19 20:57	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Benzo[b]fluoranthene	~~0.076~~	J B U	0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Benzo[g,h,i]perylene	~~0.041~~	J B U	0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Benzo[k]fluoranthene	~~0.039~~	J B U	0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1
Fluoranthene	~~0.12~~	J B U	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 20:57	1
Indeno[1,2,3-cd]pyrene	~~0.050~~	J B U	0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:57	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	~~0.084~~	J B 4	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1
Pyrene	~~0.085~~	J B 4	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1
1-Methylnaphthalene	2.3		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1
2-Methylnaphthalene	0.53		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*56*		*33 - 138*	*10/22/19 10:54*	*11/01/19 20:57*	*1*
2-Fluorobiphenyl	*81*		*15 - 122*	*10/22/19 10:54*	*11/01/19 20:57*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*10/22/19 10:54*	*11/01/19 20:57*	*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		10/22/19 10:54	11/03/19 15:02	1
Benzenethiol	ND	* U5	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 15:02	1
Benzoic acid	ND		29	7.0	ug/L		10/22/19 10:54	11/03/19 15:02	1
Benzyl alcohol	ND	U5	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 15:02	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 15:02	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/22/19 10:54	11/03/19 15:02	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 15:02	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 15:02	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/22/19 10:54	11/03/19 15:02	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 15:02	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 15:02	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 15:02	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 15:02	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 15:02	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 15:02	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 15:02	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 15:02	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 15:02	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 15:02	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 15:02	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 15:02	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 15:02	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 15:02	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 15:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 15:02	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 15:02	1
Hexachlorocyclopentadiene	ND	U5	19	2.5	ug/L		10/22/19 10:54	11/03/19 15:02	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 15:02	1
Indene	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 15:02	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 15:02	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 15:02	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 15:02	1

Client Sample ID: P93A-ROX-101519

Lab Sample ID: 400-178067-15
Matrix: Water

Date Collected: 10/15/19 12:55
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/03/19 15:02	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 15:02	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 15:02	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 15:02	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 15:02	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 15:02	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 15:02	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/22/19 10:54	11/03/19 15:02	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 15:02	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 15:02	1
Phenol	59		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 15:02	1
Pyridine	ND		9.5	3.0	ug/L		10/22/19 10:54	11/03/19 15:02	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 15:02	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*34 - 120*	*10/22/19 10:54*	*11/03/19 15:02*	*1*
2-Fluorophenol	*52*		*10 - 120*	*10/22/19 10:54*	*11/03/19 15:02*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*10/22/19 10:54*	*11/03/19 15:02*	*1*
Phenol-d5	*66*		*10 - 120*	*10/22/19 10:54*	*11/03/19 15:02*	*1*
Terphenyl-d14	*76*		*53 - 125*	*10/22/19 10:54*	*11/03/19 15:02*	*1*
2,4,6-Tribromophenol	*77*		*15 - 135*	*10/22/19 10:54*	*11/03/19 15:02*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0054	ug/L		10/24/19 08:25	10/25/19 00:38	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		10/24/19 08:25	10/25/19 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*10/24/19 08:25*	*10/25/19 00:38*	*1*

Client Sample ID: P93D-ROX-101519

Lab Sample ID: 400-178067-16

Date Collected: 10/15/19 13:25
Date Received: 10/16/19 09:22

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			10/23/19 14:55	1
Acrolein	ND		20	10	ug/L			10/23/19 14:55	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 14:55	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 14:55	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 14:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 14:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 14:55	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 14:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 14:55	1
Carbon disulfide	0.62	J	1.0	0.50	ug/L			10/23/19 14:55	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 14:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 14:55	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 14:55	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 14:55	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 14:55	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 14:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 14:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 14:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 14:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 14:55	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 14:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 14:55	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 14:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 14:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 14:55	1
Methyl tert-butyl ether	2.8		1.0	0.74	ug/L			10/23/19 14:55	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 14:55	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 14:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 14:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 14:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 14:55	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 14:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 14:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 14:55	1

Client Sample ID: P93D-ROX-101519

Lab Sample ID: 400-178067-16

Date Collected: 10/15/19 13:25
Date Received: 10/16/19 09:22

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			10/23/19 14:55	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 14:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 14:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 14:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 14:55	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 14:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 14:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 14:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 14:55	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 14:55	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 14:55	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 14:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 14:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 14:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 14:55	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 14:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 14:55	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*10/23/19 14:55*	*1*
Dibromofluoromethane	*109*		*81 - 121*		*10/23/19 14:55*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/23/19 14:55*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 21:31	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 21:31	1
Phenanthrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
1-Methylnaphthalene	0.019	J	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1
2-Methylnaphthalene	0.021	J	0.19	0.019	ug/L		10/22/19 10:54	11/01/19 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*33 - 138*	*10/22/19 10:54*	*11/01/19 21:31*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*10/22/19 10:54*	*11/01/19 21:31*	*1*

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	10/22/19 10:54	11/01/19 21:31	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		10/22/19 10:54	11/03/19 15:27	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		10/22/19 10:54	11/03/19 15:27	1
Benzoic acid	ND		29	7.0	ug/L		10/22/19 10:54	11/03/19 15:27	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		10/22/19 10:54	11/03/19 15:27	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		10/22/19 10:54	11/03/19 15:27	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		10/22/19 10:54	11/03/19 15:27	1
bis (2-chloroisopropyl) ether	ND		9.6	0.77	ug/L		10/22/19 10:54	11/03/19 15:27	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		10/22/19 10:54	11/03/19 15:27	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		10/22/19 10:54	11/03/19 15:27	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		10/22/19 10:54	11/03/19 15:27	1
4-Chloroaniline	ND		9.6	3.3	ug/L		10/22/19 10:54	11/03/19 15:27	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		10/22/19 10:54	11/03/19 15:27	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		10/22/19 10:54	11/03/19 15:27	1
2-Chlorophenol	ND		9.6	2.1	ug/L		10/22/19 10:54	11/03/19 15:27	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		10/22/19 10:54	11/03/19 15:27	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		10/22/19 10:54	11/03/19 15:27	1
Dibenzofuran	ND		9.6	0.50	ug/L		10/22/19 10:54	11/03/19 15:27	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		10/22/19 10:54	11/03/19 15:27	1
Diethyl phthalate	ND		9.6	0.67	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		10/22/19 10:54	11/03/19 15:27	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		10/22/19 10:54	11/03/19 15:27	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		10/22/19 10:54	11/03/19 15:27	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		10/22/19 10:54	11/03/19 15:27	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		10/22/19 10:54	11/03/19 15:27	1
1,4-Dioxane	ND		9.6	0.96	ug/L		10/22/19 10:54	11/03/19 15:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		10/22/19 10:54	11/03/19 15:27	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		10/22/19 10:54	11/03/19 15:27	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 15:27	1
Hexachloroethane	ND		9.6	4.0	ug/L		10/22/19 10:54	11/03/19 15:27	1
Indene	ND		9.6	0.96	ug/L		10/22/19 10:54	11/03/19 15:27	1
Isophorone	ND		9.6	0.55	ug/L		10/22/19 10:54	11/03/19 15:27	1
2-Methylphenol	ND		9.6	1.7	ug/L		10/22/19 10:54	11/03/19 15:27	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 15:27	1
2-Nitroaniline	ND		9.6	2.1	ug/L		10/22/19 10:54	11/03/19 15:27	1
3-Nitroaniline	ND		9.6	1.7	ug/L		10/22/19 10:54	11/03/19 15:27	1
4-Nitroaniline	ND		9.6	2.4	ug/L		10/22/19 10:54	11/03/19 15:27	1
Nitrobenzene	ND		9.6	0.53	ug/L		10/22/19 10:54	11/03/19 15:27	1
2-Nitrophenol	ND		9.6	0.62	ug/L		10/22/19 10:54	11/03/19 15:27	1
4-Nitrophenol	ND		9.6	2.0	ug/L		10/22/19 10:54	11/03/19 15:27	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		10/22/19 10:54	11/03/19 15:27	1

Client Sample ID: P93D-ROX-101519

Lab Sample ID: 400-178067-16

Date Collected: 10/15/19 13:25
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/03/19 15:27	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		10/22/19 10:54	11/03/19 15:27	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 15:27	1
Phenol	ND		9.6	2.5	ug/L		10/22/19 10:54	11/03/19 15:27	1
Pyridine	ND		9.6	3.1	ug/L		10/22/19 10:54	11/03/19 15:27	1
Quinoline	ND		9.6	5.7	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		10/22/19 10:54	11/03/19 15:27	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		10/22/19 10:54	11/03/19 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*34 - 120*	*10/22/19 10:54*	*11/03/19 15:27*	*1*
2-Fluorophenol	*56*		*10 - 120*	*10/22/19 10:54*	*11/03/19 15:27*	*1*
Nitrobenzene-d5	*88*		*27 - 120*	*10/22/19 10:54*	*11/03/19 15:27*	*1*
Phenol-d5	*70*		*10 - 120*	*10/22/19 10:54*	*11/03/19 15:27*	*1*
Terphenyl-d14	*117*		*53 - 125*	*10/22/19 10:54*	*11/03/19 15:27*	*1*
2,4,6-Tribromophenol	*89*		*15 - 135*	*10/22/19 10:54*	*11/03/19 15:27*	*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		0.029	0.0053	ug/L		10/24/19 08:25	10/25/19 01:02	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		10/24/19 08:25	10/25/19 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*		*51 - 149*	*10/24/19 08:25*	*10/25/19 01:02*	*1*

Client Sample ID: P93B-ROX-101519

Lab Sample ID: 400-178067-17

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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			10/23/19 16:45	1000
Acrolein	ND		20000	10000	ug/L			10/23/19 16:45	1000
Acrylonitrile	ND		10000	2800	ug/L			10/23/19 16:45	1000
Benzene	170000		1000	380	ug/L			10/23/19 16:45	1000
Bromobenzene	ND		1000	540	ug/L			10/23/19 16:45	1000
Bromochloromethane	ND		1000	520	ug/L			10/23/19 16:45	1000
Bromodichloromethane	ND		1000	500	ug/L			10/23/19 16:45	1000
Bromoform	ND		5000	710	ug/L			10/23/19 16:45	1000
Bromomethane	ND		1000	980	ug/L			10/23/19 16:45	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			10/23/19 16:45	1000
Carbon disulfide	ND		1000	500	ug/L			10/23/19 16:45	1000
Carbon tetrachloride	ND		1000	500	ug/L			10/23/19 16:45	1000
Chlorobenzene	ND		1000	500	ug/L			10/23/19 16:45	1000
Dibromochloromethane	ND		1000	500	ug/L			10/23/19 16:45	1000
Chloroethane	ND		1000	760	ug/L			10/23/19 16:45	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			10/23/19 16:45	1000
Chloroform	ND		1000	600	ug/L			10/23/19 16:45	1000
1-Chlorohexane	ND		1000	700	ug/L			10/23/19 16:45	1000
Chloromethane	ND		1000	830	ug/L			10/23/19 16:45	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			10/23/19 16:45	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			10/23/19 16:45	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			10/23/19 16:45	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			10/23/19 16:45	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			10/23/19 16:45	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			10/23/19 16:45	1000
1,1-Dichloroethane	ND		1000	500	ug/L			10/23/19 16:45	1000
1,2-Dichloroethane	ND		1000	500	ug/L			10/23/19 16:45	1000
1,1-Dichloroethene	ND		1000	500	ug/L			10/23/19 16:45	1000
1,2-Dichloropropane	ND		1000	500	ug/L			10/23/19 16:45	1000
1,3-Dichloropropane	ND		1000	500	ug/L			10/23/19 16:45	1000
2,2-Dichloropropane	ND		1000	500	ug/L			10/23/19 16:45	1000
1,1-Dichloropropene	ND		1000	500	ug/L			10/23/19 16:45	1000
Ethylbenzene	ND		1000	500	ug/L			10/23/19 16:45	1000
Ethyl methacrylate	ND		1000	600	ug/L			10/23/19 16:45	1000
Hexachlorobutadiene	ND		5000	900	ug/L			10/23/19 16:45	1000
2-Hexanone	ND		25000	3100	ug/L			10/23/19 16:45	1000
Isopropylbenzene	ND		1000	530	ug/L			10/23/19 16:45	1000
Methylene bromide	ND		5000	590	ug/L			10/23/19 16:45	1000
Methylene Chloride	ND		5000	3000	ug/L			10/23/19 16:45	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			10/23/19 16:45	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			10/23/19 16:45	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			10/23/19 16:45	1000
Naphthalene	ND		1000	1000	ug/L			10/23/19 16:45	1000
n-Butylbenzene	ND		1000	760	ug/L			10/23/19 16:45	1000
N-Propylbenzene	ND		1000	690	ug/L			10/23/19 16:45	1000
o-Chlorotoluene	ND		1000	570	ug/L			10/23/19 16:45	1000
o-Xylene	ND		5000	600	ug/L			10/23/19 16:45	1000
p-Chlorotoluene	ND		1000	560	ug/L			10/23/19 16:45	1000
p-Isopropyltoluene	ND		1000	710	ug/L			10/23/19 16:45	1000

Client Sample ID: P93B-ROX-101519

Lab Sample ID: 400-178067-17

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			10/23/19 16:45	1000
Styrene	ND		1000	1000	ug/L			10/23/19 16:45	1000
tert-Butylbenzene	ND		1000	630	ug/L			10/23/19 16:45	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			10/23/19 16:45	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			10/23/19 16:45	1000
Tetrachloroethene	ND		1000	580	ug/L			10/23/19 16:45	1000
Toluene	ND		1000	410	ug/L			10/23/19 16:45	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			10/23/19 16:45	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			10/23/19 16:45	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			10/23/19 16:45	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			10/23/19 16:45	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			10/23/19 16:45	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			10/23/19 16:45	1000
Trichloroethene	ND		1000	500	ug/L			10/23/19 16:45	1000
Trichlorofluoromethane	ND		1000	520	ug/L			10/23/19 16:45	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			10/23/19 16:45	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			10/23/19 16:45	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			10/23/19 16:45	1000
Vinyl acetate	ND		25000	2000	ug/L			10/23/19 16:45	1000
Vinyl chloride	ND		1000	500	ug/L			10/23/19 16:45	1000
Xylenes, Total	ND		10000	1600	ug/L			10/23/19 16:45	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*10/23/19 16:45*	*1000*
Dibromofluoromethane	*99*		*81 - 121*		*10/23/19 16:45*	*1000*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/19 16:45*	*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		10/22/19 10:54	11/01/19 20:05	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 20:05	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:05	1
Phenanthrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*52*		*33 - 138*	*10/22/19 10:54*	*11/01/19 20:05*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*10/22/19 10:54*	*11/01/19 20:05*	*1*

Client Sample ID: P93B-ROX-101519

Lab Sample ID: 400-178067-17

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	74		19 - 130	10/22/19 10:54	11/01/19 20:05	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		10/22/19 10:54	11/03/19 15:52	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 15:52	1
Benzoic acid	ND		29	7.0	ug/L		10/22/19 10:54	11/03/19 15:52	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 15:52	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 15:52	1
Bis(2-chloroethyl)ether	ND		9.5	0.71	ug/L		10/22/19 10:54	11/03/19 15:52	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 15:52	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 15:52	1
4-Bromophenyl phenyl ether	ND		9.5	0.31	ug/L		10/22/19 10:54	11/03/19 15:52	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 15:52	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 15:52	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 15:52	1
2-Chloronaphthalene	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 15:52	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 15:52	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 15:52	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 15:52	1
Dibenzofuran	ND		9.5	0.50	ug/L		10/22/19 10:54	11/03/19 15:52	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 15:52	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 15:52	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 15:52	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 15:52	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 15:52	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 15:52	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 15:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 15:52	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 15:52	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 15:52	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 15:52	1
Indene	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 15:52	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 15:52	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 15:52	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 15:52	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 15:52	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 15:52	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 15:52	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 15:52	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 15:52	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 15:52	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 15:52	1

Client Sample ID: P93B-ROX-101519

Lab Sample ID: 400-178067-17

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/03/19 15:52	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 15:52	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 15:52	1
Pyridine	ND		9.5	3.1	ug/L		10/22/19 10:54	11/03/19 15:52	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 15:52	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*34 - 120*	*10/22/19 10:54*	*11/03/19 15:52*	*1*
2-Fluorophenol	*47*		*10 - 120*	*10/22/19 10:54*	*11/03/19 15:52*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*10/22/19 10:54*	*11/03/19 15:52*	*1*
Phenol-d5	*70*		*10 - 120*	*10/22/19 10:54*	*11/03/19 15:52*	*1*
Terphenyl-d14	*76*		*53 - 125*	*10/22/19 10:54*	*11/03/19 15:52*	*1*
2,4,6-Tribromophenol	*85*		*15 - 135*	*10/22/19 10:54*	*11/03/19 15:52*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	150		48	12	ug/L		10/22/19 10:54	11/05/19 13:08	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		10/24/19 08:25	10/25/19 01:25	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/24/19 08:25	10/25/19 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*66*		*51 - 149*	*10/24/19 08:25*	*10/25/19 01:25*	*1*

Client Sample ID: P93B-ROX-101519-DUP

Lab Sample ID: 400-178067-18

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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			10/24/19 20:11	1000
Acrolein	ND		20000	10000	ug/L			10/24/19 20:11	1000
Acrylonitrile	ND		10000	2800	ug/L			10/24/19 20:11	1000
Benzene	150000		1000	380	ug/L			10/24/19 20:11	1000
Bromobenzene	ND		1000	540	ug/L			10/24/19 20:11	1000
Bromochloromethane	ND		1000	520	ug/L			10/24/19 20:11	1000
Bromodichloromethane	ND		1000	500	ug/L			10/24/19 20:11	1000
Bromoform	ND		5000	710	ug/L			10/24/19 20:11	1000
Bromomethane	ND		1000	980	ug/L			10/24/19 20:11	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			10/24/19 20:11	1000
Carbon disulfide	ND		1000	500	ug/L			10/24/19 20:11	1000
Carbon tetrachloride	ND		1000	500	ug/L			10/24/19 20:11	1000
Chlorobenzene	ND		1000	500	ug/L			10/24/19 20:11	1000
Dibromochloromethane	ND		1000	500	ug/L			10/24/19 20:11	1000
Chloroethane	ND		1000	760	ug/L			10/24/19 20:11	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			10/24/19 20:11	1000
Chloroform	ND		1000	600	ug/L			10/24/19 20:11	1000
1-Chlorohexane	ND		1000	700	ug/L			10/24/19 20:11	1000
Chloromethane	ND		1000	830	ug/L			10/24/19 20:11	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			10/24/19 20:11	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			10/24/19 20:11	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			10/24/19 20:11	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			10/24/19 20:11	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			10/24/19 20:11	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			10/24/19 20:11	1000
1,1-Dichloroethane	ND		1000	500	ug/L			10/24/19 20:11	1000
1,2-Dichloroethane	ND		1000	500	ug/L			10/24/19 20:11	1000
1,1-Dichloroethene	ND		1000	500	ug/L			10/24/19 20:11	1000
1,2-Dichloropropane	ND		1000	500	ug/L			10/24/19 20:11	1000
1,3-Dichloropropane	ND		1000	500	ug/L			10/24/19 20:11	1000
2,2-Dichloropropane	ND		1000	500	ug/L			10/24/19 20:11	1000
1,1-Dichloropropene	ND		1000	500	ug/L			10/24/19 20:11	1000
Ethylbenzene	ND		1000	500	ug/L			10/24/19 20:11	1000
Ethyl methacrylate	ND		1000	600	ug/L			10/24/19 20:11	1000
Hexachlorobutadiene	ND		5000	900	ug/L			10/24/19 20:11	1000
2-Hexanone	ND		25000	3100	ug/L			10/24/19 20:11	1000
Isopropylbenzene	ND		1000	530	ug/L			10/24/19 20:11	1000
Methylene bromide	ND		5000	590	ug/L			10/24/19 20:11	1000
Methylene Chloride	ND		5000	3000	ug/L			10/24/19 20:11	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			10/24/19 20:11	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			10/24/19 20:11	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			10/24/19 20:11	1000
Naphthalene	ND		1000	1000	ug/L			10/24/19 20:11	1000
n-Butylbenzene	ND		1000	760	ug/L			10/24/19 20:11	1000
N-Propylbenzene	ND		1000	690	ug/L			10/24/19 20:11	1000
o-Chlorotoluene	ND		1000	570	ug/L			10/24/19 20:11	1000
o-Xylene	ND		5000	600	ug/L			10/24/19 20:11	1000
p-Chlorotoluene	ND		1000	560	ug/L			10/24/19 20:11	1000
p-Isopropyltoluene	ND		1000	710	ug/L			10/24/19 20:11	1000

Client Sample ID: P93B-ROX-101519-DUP

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			10/24/19 20:11	1000
Styrene	ND		1000	1000	ug/L			10/24/19 20:11	1000
tert-Butylbenzene	ND		1000	630	ug/L			10/24/19 20:11	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			10/24/19 20:11	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			10/24/19 20:11	1000
Tetrachloroethene	ND		1000	580	ug/L			10/24/19 20:11	1000
Toluene	ND		1000	410	ug/L			10/24/19 20:11	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			10/24/19 20:11	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			10/24/19 20:11	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			10/24/19 20:11	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			10/24/19 20:11	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			10/24/19 20:11	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			10/24/19 20:11	1000
Trichloroethene	ND		1000	500	ug/L			10/24/19 20:11	1000
Trichlorofluoromethane	ND		1000	520	ug/L			10/24/19 20:11	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			10/24/19 20:11	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			10/24/19 20:11	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			10/24/19 20:11	1000
Vinyl acetate	ND		25000	2000	ug/L			10/24/19 20:11	1000
Vinyl chloride	ND		1000	500	ug/L			10/24/19 20:11	1000
Xylenes, Total	ND		10000	1600	ug/L			10/24/19 20:11	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*10/24/19 20:11*	*1000*
Dibromofluoromethane	*106*		*81 - 121*		*10/24/19 20:11*	*1000*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/24/19 20:11*	*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		10/22/19 10:54	11/01/19 20:39	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1
Anthracene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Chrysene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Fluoranthene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1
Fluorene	ND		0.19	0.020	ug/L		10/22/19 10:54	11/01/19 20:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/22/19 10:54	11/01/19 20:39	1
Phenanthrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1
Pyrene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1
1-Methylnaphthalene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1
2-Methylnaphthalene	ND		0.19	0.019	ug/L		10/22/19 10:54	11/01/19 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*48*		*33 - 138*	*10/22/19 10:54*	*11/01/19 20:39*	*1*
2-Fluorobiphenyl	*63*		*15 - 122*	*10/22/19 10:54*	*11/01/19 20:39*	*1*

Client Sample ID: P93B-ROX-101519-DUP

Lab Sample ID: 400-178067-18
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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	10/22/19 10:54	11/01/19 20:39	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		10/22/19 10:54	11/03/19 16:16	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/22/19 10:54	11/03/19 16:16	1
Benzoic acid	ND		29	6.9	ug/L		10/22/19 10:54	11/03/19 16:16	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/22/19 10:54	11/03/19 16:16	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 16:16	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/22/19 10:54	11/03/19 16:16	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/22/19 10:54	11/03/19 16:16	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		10/22/19 10:54	11/03/19 16:16	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/22/19 10:54	11/03/19 16:16	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/22/19 10:54	11/03/19 16:16	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/22/19 10:54	11/03/19 16:16	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/22/19 10:54	11/03/19 16:16	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 16:16	1
2-Chlorophenol	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 16:16	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 16:16	1
Dibenz[a,h]acridine	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 16:16	1
Dibenzofuran	ND		9.5	0.49	ug/L		10/22/19 10:54	11/03/19 16:16	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		10/22/19 10:54	11/03/19 16:16	1
Diethyl phthalate	ND		9.5	0.67	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 16:16	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/22/19 10:54	11/03/19 16:16	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/22/19 10:54	11/03/19 16:16	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/22/19 10:54	11/03/19 16:16	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/22/19 10:54	11/03/19 16:16	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 16:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 16:16	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/22/19 10:54	11/03/19 16:16	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		10/22/19 10:54	11/03/19 16:16	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/22/19 10:54	11/03/19 16:16	1
Indene	ND		9.5	0.95	ug/L		10/22/19 10:54	11/03/19 16:16	1
Isophorone	ND		9.5	0.54	ug/L		10/22/19 10:54	11/03/19 16:16	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 16:16	1
3 & 4 Methylphenol	ND		19	0.99	ug/L		10/22/19 10:54	11/03/19 16:16	1
2-Nitroaniline	ND		9.5	2.1	ug/L		10/22/19 10:54	11/03/19 16:16	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/22/19 10:54	11/03/19 16:16	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/22/19 10:54	11/03/19 16:16	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/22/19 10:54	11/03/19 16:16	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/22/19 10:54	11/03/19 16:16	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/22/19 10:54	11/03/19 16:16	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 16:16	1

Client Sample ID: P93B-ROX-101519-DUP

Lab Sample ID: 400-178067-18

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

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		10/22/19 10:54	11/03/19 16:16	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/22/19 10:54	11/03/19 16:16	1
Pentachlorophenol	ND		19	1.7	ug/L		10/22/19 10:54	11/03/19 16:16	1
Pyridine	ND		9.5	3.0	ug/L		10/22/19 10:54	11/03/19 16:16	1
Quinoline	ND		9.5	5.7	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/22/19 10:54	11/03/19 16:16	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/19 10:54	11/03/19 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 120*	*10/22/19 10:54*	*11/03/19 16:16*	*1*
2-Fluorophenol	*54*		*10 - 120*	*10/22/19 10:54*	*11/03/19 16:16*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*10/22/19 10:54*	*11/03/19 16:16*	*1*
Phenol-d5	*64*		*10 - 120*	*10/22/19 10:54*	*11/03/19 16:16*	*1*
Terphenyl-d14	*77*		*53 - 125*	*10/22/19 10:54*	*11/03/19 16:16*	*1*
2,4,6-Tribromophenol	*76*		*15 - 135*	*10/22/19 10:54*	*11/03/19 16:16*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	130		48	12	ug/L		10/22/19 10:54	11/05/19 13:29	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		10/24/19 08:25	10/25/19 01:49	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		10/24/19 08:25	10/25/19 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*10/24/19 08:25*	*10/25/19 01:49*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

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.
X	Surrogate is outside control limits

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

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: 400-178067-1

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)
400-178067-2	TB-ROX-101519-8260	106	102	98
400-178067-2 - RA	TB-ROX-101519-8260	104	108	98
400-178067-3	MW5-ROX-101519	122 X	102	100
400-178067-5	MW22-ROX-101519	103	104	96
400-178067-5 - DL	MW22-ROX-101519	91	114	97
400-178067-6	MW22-ROX-101519-DUP	101	106	97
400-178067-6 - DL	MW22-ROX-101519-DUP	106	110	103
400-178067-7	P59-ROX-101519	105	102	97
400-178067-8	P57-ROX-101519	109	108	100
400-178067-9	P57-ROX-101519-DUP	116	110	99
400-178067-11	TB-ROX-101519-8260-SS	105	104	97
400-178067-12	P56-ROX-101519	113	97	107
400-178067-13	T12-ROX-101519	106	101	99
400-178067-14	P93A-ROX-101519-EB	107	100	98
400-178067-15	P93A-ROX-101519	107	104	100
400-178067-15 - DL	P93A-ROX-101519	111	104	93
400-178067-16	P93D-ROX-101519	107	109	100
400-178067-17	P93B-ROX-101519	107	99	96
400-178067-18	P93B-ROX-101519-DUP	109	106	94
LCS 400-462744/1002	Lab Control Sample	105	110	97
LCS 400-462942/1002	Lab Control Sample	99	107	98
LCS 400-463113/1002	Lab Control Sample	90	104	95
LCS 400-463326/1002	Lab Control Sample	103	107	98
MB 400-462744/4	Method Blank	106	103	98
MB 400-462942/4	Method Blank	108	110	97
MB 400-463113/4	Method Blank	103	109	100
MB 400-463326/5	Method Blank	107	108	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-178067-3	MW5-ROX-101519	86	66	83	81	81	112
400-178067-5	MW22-ROX-101519	79	41	70	60	74	76
400-178067-6	MW22-ROX-101519-DUP	82	46	72	63	70	83
400-178067-7	P59-ROX-101519	88	40	83	66	66	100
400-178067-8	P57-ROX-101519	89	77	87	83	71	96
400-178067-9	P57-ROX-101519-DUP	78	50	73	70	83	83
400-178067-12	P56-ROX-101519	88	17	81	46	44 X	95
400-178067-13	T12-ROX-101519	85	58	95	77	81	99
400-178067-14	P93A-ROX-101519-EB	68	49	61	58	81	59
400-178067-15	P93A-ROX-101519	80	52	72	66	76	77
400-178067-16	P93D-ROX-101519	97	56	88	70	117	89

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (34-120)	2FP (10-120)	NBZ (27-120)	PHL (10-120)	TPHL (53-125)	TBP (15-135)
400-178067-17	P93B-ROX-101519	88	47	73	70	76	85
400-178067-18	P93B-ROX-101519-DUP	81	54	73	64	77	76
LCS 400-462401/2-A	Lab Control Sample	61	16	69	38	68	57
LCS 400-462401/4-A	Lab Control Sample	81	22	71	41	77	64
LCS 400-462605/2-A	Lab Control Sample	82	43	88	78	91	99
LCS 400-462605/6-A	Lab Control Sample	86	37	93	75	99	44
LCSD 400-462401/3-A	Lab Control Sample Dup	76	44	79	62	77	70
LCSD 400-462401/5-A	Lab Control Sample Dup	83	15	70	34	85	72
LCSD 400-462605/3-A	Lab Control Sample Dup	88	55	98	90	99	105
LCSD 400-462605/7-A	Lab Control Sample Dup	85	19	90	64	96	26
MB 400-462401/1-A	Method Blank	72	33	69	56	80	60
MB 400-462605/1-A	Method Blank	100	51	105	92	116	92

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)
400-178067-3	MW5-ROX-101519	44	62	68
400-178067-5	MW22-ROX-101519	62	81	86
400-178067-6	MW22-ROX-101519-DUP	56	75	81
400-178067-7	P59-ROX-101519	44	55	75
400-178067-8	P57-ROX-101519	94	93	109
400-178067-9	P57-ROX-101519-DUP	91	72	94
400-178067-12	P56-ROX-101519	33	74	179 X
400-178067-13	T12-ROX-101519	50	59	76
400-178067-14	P93A-ROX-101519-EB	127	98	114
400-178067-15	P93A-ROX-101519	56	81	79
400-178067-16	P93D-ROX-101519	60	72	73
400-178067-17	P93B-ROX-101519	52	72	74
400-178067-18	P93B-ROX-101519-DUP	48	63	66
LCS 400-462401/2-A	Lab Control Sample	80	77	60
LCS 400-462605/2-A	Lab Control Sample	111	94	83
LCSD 400-462401/3-A	Lab Control Sample Dup	75	82	57
LCSD 400-462605/3-A	Lab Control Sample Dup	116	101	84
MB 400-462401/1-A	Method Blank	71	69	79
MB 400-462605/1-A	Method Blank	144 X	114	111

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

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)
400-178067-1	TB-ROX-101519-8011	130 p
400-178067-3	MW5-ROX-101519	94
400-178067-5	MW22-ROX-101519	100 p
400-178067-6	MW22-ROX-101519-DUP	100 p
400-178067-7	P59-ROX-101519	67
400-178067-8	P57-ROX-101519	96
400-178067-9	P57-ROX-101519-DUP	103
LCS 400-462940/2-A	Lab Control Sample	94
LCSD 400-462940/3-A	Lab Control Sample Dup	93
MB 400-462940/1-A	Method Blank	93

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (51-149)
400-178067-10	TB-ROX-101519-8011-SS	144
400-178067-12	P56-ROX-101519	76
400-178067-13	T12-ROX-101519	56
400-178067-14	P93A-ROX-101519-EB	96
400-178067-15	P93A-ROX-101519	74
400-178067-16	P93D-ROX-101519	64
400-178067-17	P93B-ROX-101519	66
400-178067-18	P93B-ROX-101519-DUP	74

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

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: 400-178067-1

Client Sample ID: TB-ROX-101519-8011

Lab Sample ID: 400-178067-1
Matrix: Water

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			29.9 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 19:54	KLR	TAL PEN

Client Sample ID: TB-ROX-101519-8260

Lab Sample ID: 400-178067-2
Matrix: Water

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 12:00	RS	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	462942	10/24/19 15:47	CS	TAL PEN

Client Sample ID: MW5-ROX-101519

Lab Sample ID: 400-178067-3
Matrix: Water

Date Collected: 10/15/19 09:25
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 14:11	RS	TAL PEN
Total/NA	Prep	3520C			1048.4 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464466	11/04/19 16:14	VC1	TAL PEN
Total/NA	Prep	3520C			1048.4 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 19:12	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 20:18	KLR	TAL PEN

Client Sample ID: MW22-ROX-101519

Lab Sample ID: 400-178067-5
Matrix: Water

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462942	10/24/19 17:59	CS	TAL PEN
Total/NA	Analysis	8260B	DL	2	5 mL	5 mL	463113	10/25/19 18:39	CAR	TAL PEN
Total/NA	Prep	3520C			1052.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 12:59	VC1	TAL PEN
Total/NA	Prep	3520C			1052.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 19:30	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 20:42	KLR	TAL PEN

Client Sample ID: MW22-ROX-101519-DUP

Lab Sample ID: 400-178067-6
Matrix: Water

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462942	10/24/19 18:21	CS	TAL PEN
Total/NA	Analysis	8260B	DL	2	5 mL	5 mL	463326	10/27/19 17:11	CS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: MW22-ROX-101519-DUP

Lab Sample ID: 400-178067-6
Matrix: Water

Date Collected: 10/15/19 11:35
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1050.8 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 13:23	VC1	TAL PEN
Total/NA	Prep	3520C			1050.8 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 19:47	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 21:06	KLR	TAL PEN

Client Sample ID: P59-ROX-101519

Lab Sample ID: 400-178067-7
Matrix: Water

Date Collected: 10/15/19 13:20
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	462942	10/24/19 18:43	CS	TAL PEN
Total/NA	Prep	3520C			1047.2 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 13:48	VC1	TAL PEN
Total/NA	Prep	3520C			1047.2 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 21:49	PP1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 21:29	KLR	TAL PEN

Client Sample ID: P57-ROX-101519

Lab Sample ID: 400-178067-8
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	462942	10/24/19 19:05	CS	TAL PEN
Total/NA	Prep	3520C	RA2		1052.2 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D	RA2	1			464941	11/07/19 10:11	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1052.2 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D	RA	1			463466	10/28/19 20:53	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1052.2 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D	DL	5			463466	10/28/19 21:19	VC1	TAL PEN
Total/NA	Prep	3520C			1052.2 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D		1			463014	10/24/19 23:26	VC1	TAL PEN
Total/NA	Prep	3520C			1052.2 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/25/19 00:34	PP1	TAL PEN
Total/NA	Prep	8011			37 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 21:53	KLR	TAL PEN

Client Sample ID: P57-ROX-101519-DUP

Lab Sample ID: 400-178067-9
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	463326	10/27/19 17:55	CS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: P57-ROX-101519-DUP

Lab Sample ID: 400-178067-9

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RA2		1045.6 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D	RA2	1			464941	11/07/19 10:33	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1045.6 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D	RA	1			463466	10/28/19 21:44	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1045.6 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D	DL	5			463466	10/28/19 22:10	VC1	TAL PEN
Total/NA	Prep	3520C			1045.6 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D		1			463014	10/24/19 23:00	VC1	TAL PEN
Total/NA	Prep	3520C			1045.6 mL	1 mL	462401	10/21/19 18:49	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/25/19 00:50	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 22:17	KLR	TAL PEN

Client Sample ID: TB-ROX-101519-8011-SS

Lab Sample ID: 400-178067-10

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.8 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 23:04	KLR	TAL PEN

Client Sample ID: TB-ROX-101519-8260-SS

Lab Sample ID: 400-178067-11

Date Collected: 10/15/19 00:00
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 12:22	RS	TAL PEN

Client Sample ID: P56-ROX-101519

Lab Sample ID: 400-178067-12

Date Collected: 10/15/19 09:45
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 14:33	RS	TAL PEN
Total/NA	Prep	3520C			1050.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	464353	11/03/19 14:13	VC1	TAL PEN
Total/NA	Prep	3520C			1050.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 21:14	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 23:27	KLR	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: T12-ROX-101519

Lab Sample ID: 400-178067-13

Date Collected: 10/15/19 10:35
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	462744	10/23/19 15:17	RS	TAL PEN
Total/NA	Prep	3520C			1050.2 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 14:37	VC1	TAL PEN
Total/NA	Prep	3520C			1050.2 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 20:22	PP1	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 23:51	KLR	TAL PEN

Client Sample ID: P93A-ROX-101519-EB

Lab Sample ID: 400-178067-14

Date Collected: 10/15/19 12:10
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 13:05	RS	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	462942	10/24/19 16:09	CS	TAL PEN
Total/NA	Prep	3520C	RA2		1050.8 mL	1 mL	462401	10/21/19 18:51	HAD	TAL PEN
Total/NA	Analysis	8270D	RA2	1			464941	11/07/19 10:55	VC1	TAL PEN
Total/NA	Prep	3520C	RA		1050.8 mL	1 mL	462401	10/21/19 18:51	HAD	TAL PEN
Total/NA	Analysis	8270D	RA	1			463466	10/28/19 22:35	VC1	TAL PEN
Total/NA	Prep	3520C			1050.8 mL	1 mL	462401	10/21/19 18:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			463014	10/24/19 22:35	VC1	TAL PEN
Total/NA	Prep	3520C			1050.8 mL	1 mL	462401	10/21/19 18:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			463023	10/25/19 01:06	PP1	TAL PEN
Total/NA	Prep	8011			35.6 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 00:14	KLR	TAL PEN

Client Sample ID: P93A-ROX-101519

Lab Sample ID: 400-178067-15

Date Collected: 10/15/19 12:55
Date Received: 10/16/19 09:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	5 mL	5 mL	462744	10/23/19 15:39	RS	TAL PEN
Total/NA	Analysis	8260B	DL	1000	5 mL	5 mL	462942	10/24/19 19:49	CS	TAL PEN
Total/NA	Prep	3520C			1049.8 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 15:02	VC1	TAL PEN
Total/NA	Prep	3520C			1049.8 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 20:57	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 00:38	KLR	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: P93D-ROX-101519

Lab Sample ID: 400-178067-16
Matrix: Water

Date Collected: 10/15/19 13:25
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462744	10/23/19 14:55	RS	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 15:27	VC1	TAL PEN
Total/NA	Prep	3520C			1045.8 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 21:31	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 01:02	KLR	TAL PEN

Client Sample ID: P93B-ROX-101519

Lab Sample ID: 400-178067-17
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	462744	10/23/19 16:45	RS	TAL PEN
Total/NA	Prep	3520C	DL		1049 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D	DL	5			464602	11/05/19 13:08	VC1	TAL PEN
Total/NA	Prep	3520C			1049 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 15:52	VC1	TAL PEN
Total/NA	Prep	3520C			1049 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 20:05	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 01:25	KLR	TAL PEN

Client Sample ID: P93B-ROX-101519-DUP

Lab Sample ID: 400-178067-18
Matrix: Water

Date Collected: 10/15/19 14:15
Date Received: 10/16/19 09:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	462942	10/24/19 20:11	CS	TAL PEN
Total/NA	Prep	3520C	DL		1051.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D	DL	5			464602	11/05/19 13:29	VC1	TAL PEN
Total/NA	Prep	3520C			1051.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464353	11/03/19 16:16	VC1	TAL PEN
Total/NA	Prep	3520C			1051.6 mL	1 mL	462605	10/22/19 10:54	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464199	11/01/19 20:39	PP1	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	462940	10/24/19 08:25	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/25/19 01:49	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462401/1-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 21:01	VC1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462401/1-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 09:56	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462605/1-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 10:13	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			464437	11/04/19 21:03	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462744/4

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	462744	10/23/19 08:12	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462940/1-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	462940	10/24/19 08:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 18:42	KLR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-462942/4

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	462942	10/24/19 12:09	CS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-463113/4

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	463113	10/25/19 10:00	CAR	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-463326/5

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	463326	10/27/19 09:30	CS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462401/2-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:27	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:14	KJA	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462401/4-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462605/2-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	464293	11/02/19 10:33	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			464437	11/04/19 21:19	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462605/6-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 11:57	VC1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-462744/1002

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	462744	10/23/19 07:16	RS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462940/2-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	462940	10/24/19 08:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 19:06	KLR	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-462942/1002
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	462942	10/24/19 11:09	CS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-463113/1002
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	463113	10/25/19 09:02	CAR	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-463326/1002
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	463326	10/27/19 07:55	CS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-462401/3-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:52	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:31	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-462401/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:42	VC1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462605/3-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	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 10:54	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			464437	11/04/19 21:35	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462605/7-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	462605	10/22/19 10:51	HAD	TAL PEN
Total/NA	Analysis	8270D		1			464293	11/02/19 12:18	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-462940/3-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	462940	10/24/19 08:24	TMB	TAL PEN
Total/NA	Analysis	8011		1			463064	10/24/19 19:30	KLR	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

GC/MS VOA

Analysis Batch: 462744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-2	TB-ROX-101519-8260	Total/NA	Water	8260B	
400-178067-3	MW5-ROX-101519	Total/NA	Water	8260B	
400-178067-11	TB-ROX-101519-8260-SS	Total/NA	Water	8260B	
400-178067-12	P56-ROX-101519	Total/NA	Water	8260B	
400-178067-13	T12-ROX-101519	Total/NA	Water	8260B	
400-178067-14	P93A-ROX-101519-EB	Total/NA	Water	8260B	
400-178067-15	P93A-ROX-101519	Total/NA	Water	8260B	
400-178067-16	P93D-ROX-101519	Total/NA	Water	8260B	
400-178067-17	P93B-ROX-101519	Total/NA	Water	8260B	
MB 400-462744/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462744/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 462942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-2 - RA	TB-ROX-101519-8260	Total/NA	Water	8260B	
400-178067-5	MW22-ROX-101519	Total/NA	Water	8260B	
400-178067-6	MW22-ROX-101519-DUP	Total/NA	Water	8260B	
400-178067-7	P59-ROX-101519	Total/NA	Water	8260B	
400-178067-8	P57-ROX-101519	Total/NA	Water	8260B	
400-178067-14 - RA	P93A-ROX-101519-EB	Total/NA	Water	8260B	
400-178067-15 - DL	P93A-ROX-101519	Total/NA	Water	8260B	
400-178067-18	P93B-ROX-101519-DUP	Total/NA	Water	8260B	
MB 400-462942/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462942/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 463113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-5 - DL	MW22-ROX-101519	Total/NA	Water	8260B	
MB 400-463113/4	Method Blank	Total/NA	Water	8260B	
LCS 400-463113/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 463326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-6 - DL	MW22-ROX-101519-DUP	Total/NA	Water	8260B	
400-178067-9	P57-ROX-101519-DUP	Total/NA	Water	8260B	
MB 400-463326/5	Method Blank	Total/NA	Water	8260B	
LCS 400-463326/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 462401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-8 - RA2	P57-ROX-101519	Total/NA	Water	3520C	
400-178067-8	P57-ROX-101519	Total/NA	Water	3520C	
400-178067-8 - DL	P57-ROX-101519	Total/NA	Water	3520C	
400-178067-8 - RA	P57-ROX-101519	Total/NA	Water	3520C	
400-178067-9 - RA2	P57-ROX-101519-DUP	Total/NA	Water	3520C	
400-178067-9	P57-ROX-101519-DUP	Total/NA	Water	3520C	
400-178067-9 - DL	P57-ROX-101519-DUP	Total/NA	Water	3520C	
400-178067-9 - RA	P57-ROX-101519-DUP	Total/NA	Water	3520C	
400-178067-14 - RA2	P93A-ROX-101519-EB	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 462401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-14	P93A-ROX-101519-EB	Total/NA	Water	3520C	
400-178067-14 - RA	P93A-ROX-101519-EB	Total/NA	Water	3520C	
MB 400-462401/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 462605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-3	MW5-ROX-101519	Total/NA	Water	3520C	
400-178067-5	MW22-ROX-101519	Total/NA	Water	3520C	
400-178067-6	MW22-ROX-101519-DUP	Total/NA	Water	3520C	
400-178067-7	P59-ROX-101519	Total/NA	Water	3520C	
400-178067-12	P56-ROX-101519	Total/NA	Water	3520C	
400-178067-13	T12-ROX-101519	Total/NA	Water	3520C	
400-178067-15	P93A-ROX-101519	Total/NA	Water	3520C	
400-178067-16	P93D-ROX-101519	Total/NA	Water	3520C	
400-178067-17	P93B-ROX-101519	Total/NA	Water	3520C	
400-178067-17 - DL	P93B-ROX-101519	Total/NA	Water	3520C	
400-178067-18	P93B-ROX-101519-DUP	Total/NA	Water	3520C	
400-178067-18 - DL	P93B-ROX-101519-DUP	Total/NA	Water	3520C	
MB 400-462605/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462605/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462605/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462605/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462605/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D LL	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462401

Analysis Batch: 462867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401

Analysis Batch: 463014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-8	P57-ROX-101519	Total/NA	Water	8270D	462401
400-178067-9	P57-ROX-101519-DUP	Total/NA	Water	8270D	462401
400-178067-14	P93A-ROX-101519-EB	Total/NA	Water	8270D	462401

Analysis Batch: 463023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-8	P57-ROX-101519	Total/NA	Water	8270D LL	462401

GC/MS Semi VOA (Continued)

Analysis Batch: 463023 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-9	P57-ROX-101519-DUP	Total/NA	Water	8270D LL	462401
400-178067-14	P93A-ROX-101519-EB	Total/NA	Water	8270D LL	462401

Analysis Batch: 463466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-8 - RA	P57-ROX-101519	Total/NA	Water	8270D	462401
400-178067-8 - DL	P57-ROX-101519	Total/NA	Water	8270D	462401
400-178067-9 - RA	P57-ROX-101519-DUP	Total/NA	Water	8270D	462401
400-178067-9 - DL	P57-ROX-101519-DUP	Total/NA	Water	8270D	462401
400-178067-14 - RA	P93A-ROX-101519-EB	Total/NA	Water	8270D	462401

Analysis Batch: 464199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-3	MW5-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-5	MW22-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-6	MW22-ROX-101519-DUP	Total/NA	Water	8270D LL	462605
400-178067-7	P59-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-12	P56-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-13	T12-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-15	P93A-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-16	P93D-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-17	P93B-ROX-101519	Total/NA	Water	8270D LL	462605
400-178067-18	P93B-ROX-101519-DUP	Total/NA	Water	8270D LL	462605

Analysis Batch: 464293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462605/1-A	Method Blank	Total/NA	Water	8270D	462605
LCS 400-462605/2-A	Lab Control Sample	Total/NA	Water	8270D	462605
LCS 400-462605/6-A	Lab Control Sample	Total/NA	Water	8270D	462605
LCSD 400-462605/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462605
LCSD 400-462605/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	462605

Analysis Batch: 464353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-5	MW22-ROX-101519	Total/NA	Water	8270D	462605
400-178067-6	MW22-ROX-101519-DUP	Total/NA	Water	8270D	462605
400-178067-7	P59-ROX-101519	Total/NA	Water	8270D	462605
400-178067-12	P56-ROX-101519	Total/NA	Water	8270D	462605
400-178067-13	T12-ROX-101519	Total/NA	Water	8270D	462605
400-178067-15	P93A-ROX-101519	Total/NA	Water	8270D	462605
400-178067-16	P93D-ROX-101519	Total/NA	Water	8270D	462605
400-178067-17	P93B-ROX-101519	Total/NA	Water	8270D	462605
400-178067-18	P93B-ROX-101519-DUP	Total/NA	Water	8270D	462605

Analysis Batch: 464437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-462605/1-A	Method Blank	Total/NA	Water	8270D LL	462605
LCS 400-462605/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462605
LCSD 400-462605/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462605

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

GC/MS Semi VOA

Analysis Batch: 464466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-3	MW5-ROX-101519	Total/NA	Water	8270D	462605

Analysis Batch: 464602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-17 - DL	P93B-ROX-101519	Total/NA	Water	8270D	462605
400-178067-18 - DL	P93B-ROX-101519-DUP	Total/NA	Water	8270D	462605

Analysis Batch: 464941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-8 - RA2	P57-ROX-101519	Total/NA	Water	8270D	462401
400-178067-9 - RA2	P57-ROX-101519-DUP	Total/NA	Water	8270D	462401
400-178067-14 - RA2	P93A-ROX-101519-EB	Total/NA	Water	8270D	462401

GC Semi VOA

Prep Batch: 462940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-1	TB-ROX-101519-8011	Total/NA	Water	8011	
400-178067-3	MW5-ROX-101519	Total/NA	Water	8011	
400-178067-5	MW22-ROX-101519	Total/NA	Water	8011	
400-178067-6	MW22-ROX-101519-DUP	Total/NA	Water	8011	
400-178067-7	P59-ROX-101519	Total/NA	Water	8011	
400-178067-8	P57-ROX-101519	Total/NA	Water	8011	
400-178067-9	P57-ROX-101519-DUP	Total/NA	Water	8011	
400-178067-10	TB-ROX-101519-8011-SS	Total/NA	Water	8011	
400-178067-12	P56-ROX-101519	Total/NA	Water	8011	
400-178067-13	T12-ROX-101519	Total/NA	Water	8011	
400-178067-14	P93A-ROX-101519-EB	Total/NA	Water	8011	
400-178067-15	P93A-ROX-101519	Total/NA	Water	8011	
400-178067-16	P93D-ROX-101519	Total/NA	Water	8011	
400-178067-17	P93B-ROX-101519	Total/NA	Water	8011	
400-178067-18	P93B-ROX-101519-DUP	Total/NA	Water	8011	
MB 400-462940/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462940/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462940/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 463064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-1	TB-ROX-101519-8011	Total/NA	Water	8011	462940
400-178067-3	MW5-ROX-101519	Total/NA	Water	8011	462940
400-178067-5	MW22-ROX-101519	Total/NA	Water	8011	462940
400-178067-6	MW22-ROX-101519-DUP	Total/NA	Water	8011	462940
400-178067-7	P59-ROX-101519	Total/NA	Water	8011	462940
400-178067-8	P57-ROX-101519	Total/NA	Water	8011	462940
400-178067-9	P57-ROX-101519-DUP	Total/NA	Water	8011	462940
400-178067-10	TB-ROX-101519-8011-SS	Total/NA	Water	8011	462940
400-178067-12	P56-ROX-101519	Total/NA	Water	8011	462940
400-178067-13	T12-ROX-101519	Total/NA	Water	8011	462940
400-178067-14	P93A-ROX-101519-EB	Total/NA	Water	8011	462940
400-178067-15	P93A-ROX-101519	Total/NA	Water	8011	462940
400-178067-16	P93D-ROX-101519	Total/NA	Water	8011	462940

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-1

GC Semi VOA (Continued)

Analysis Batch: 463064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-17	P93B-ROX-101519	Total/NA	Water	8011	462940
400-178067-18	P93B-ROX-101519-DUP	Total/NA	Water	8011	462940
MB 400-462940/1-A	Method Blank	Total/NA	Water	8011	462940
LCS 400-462940/2-A	Lab Control Sample	Total/NA	Water	8011	462940
LCSD 400-462940/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462940

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/23/19 08:12	1
Acrolein	ND		20	10	ug/L			10/23/19 08:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:12	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:12	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:12	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:12	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:12	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:12	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:12	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:12	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:12	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 08:12*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*10/23/19 08:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 08:12*	*1*

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	193		ug/L		96	43 - 160
Acrolein	500	550		ug/L		110	38 - 160
Acrylonitrile	500	482		ug/L		96	64 - 142
Benzene	50.0	44.5		ug/L		89	70 - 130
Bromobenzene	50.0	44.3		ug/L		89	70 - 132
Bromochloromethane	50.0	43.9		ug/L		88	70 - 130
Bromodichloromethane	50.0	46.6		ug/L		93	67 - 133
Bromoform	50.0	51.8		ug/L		104	57 - 140
Bromomethane	50.0	51.6		ug/L		103	10 - 160
2-Butanone (MEK)	200	186		ug/L		93	61 - 145
Carbon disulfide	50.0	38.9		ug/L		78	61 - 137
Carbon tetrachloride	50.0	45.8		ug/L		92	61 - 137
Chlorobenzene	50.0	43.2		ug/L		86	70 - 130
Dibromochloromethane	50.0	38.5		ug/L		77	67 - 135
Chloroethane	50.0	50.0		ug/L		100	55 - 141

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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	45.3		ug/L		91	10 - 160
Chloroform	50.0	45.6		ug/L		91	69 - 130
1-Chlorohexane	50.0	44.3		ug/L		89	69 - 130
Chloromethane	50.0	38.5		ug/L		77	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	41.8		ug/L		84	69 - 132
1,2-Dichlorobenzene	50.0	42.1		ug/L		84	67 - 130
1,3-Dichlorobenzene	50.0	42.5		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
Dichlorodifluoromethane	50.0	30.3		ug/L		61	41 - 146
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	43.6		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	44.6		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	42.3		ug/L		85	70 - 130
2,2-Dichloropropane	50.0	45.0		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	45.7		ug/L		91	70 - 130
Ethylbenzene	50.0	42.9		ug/L		86	70 - 130
Ethyl methacrylate	50.0	41.5		ug/L		83	68 - 130
Hexachlorobutadiene	50.0	45.6		ug/L		91	53 - 140
2-Hexanone	200	193		ug/L		97	65 - 137
Isopropylbenzene	50.0	38.8		ug/L		78	70 - 130
Methylene bromide	50.0	45.4		ug/L		91	70 - 130
Methylene Chloride	50.0	41.6		ug/L		83	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	40.6		ug/L		81	66 - 130
m-Xylene & p-Xylene	50.0	43.0		ug/L		86	70 - 130
Naphthalene	50.0	29.8		ug/L		60	47 - 149
n-Butylbenzene	50.0	39.2		ug/L		78	67 - 130
N-Propylbenzene	50.0	41.9		ug/L		84	70 - 130
o-Chlorotoluene	50.0	45.5		ug/L		91	70 - 130
o-Xylene	50.0	41.8		ug/L		84	70 - 130
p-Chlorotoluene	50.0	41.8		ug/L		84	70 - 130
p-Isopropyltoluene	50.0	39.6		ug/L		79	65 - 130
sec-Butylbenzene	50.0	40.9		ug/L		82	66 - 130
Styrene	50.0	42.2		ug/L		84	70 - 130
tert-Butylbenzene	50.0	40.2		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	37.6		ug/L		75	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 131
Tetrachloroethene	50.0	39.7		ug/L		79	65 - 130
Toluene	50.0	43.4		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	45.2		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	39.6		ug/L		79	63 - 130
1,2,3-Trichlorobenzene	50.0	34.8		ug/L		70	60 - 138
1,2,4-Trichlorobenzene	50.0	37.8		ug/L		76	60 - 140
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	70 - 130
Trichloroethene	50.0	42.2		ug/L		84	70 - 130
Trichlorofluoromethane	50.0	51.3		ug/L		103	65 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.2		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	41.5		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	50.0	40.3		ug/L		81	69 - 130
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	46.2		ug/L		92	59 - 136
Xylenes, Total	100	84.8		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*78 - 118*
Dibromofluoromethane	*110*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 400-462942/4
Matrix: Water
Analysis Batch: 462942

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/24/19 12:09	1
Acrolein	ND		20	10	ug/L			10/24/19 12:09	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/19 12:09	1
Benzene	ND		1.0	0.38	ug/L			10/24/19 12:09	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/19 12:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/19 12:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Bromoform	ND		5.0	0.71	ug/L			10/24/19 12:09	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/19 12:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/19 12:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/19 12:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/19 12:09	1
Chloroform	ND		1.0	0.60	ug/L			10/24/19 12:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/24/19 12:09	1
Chloromethane	ND		1.0	0.83	ug/L			10/24/19 12:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 12:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/19 12:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/19 12:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/19 12:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/19 12:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-462942/4
Matrix: Water
Analysis Batch: 462942

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			10/24/19 12:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/19 12:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/19 12:09	1
2-Hexanone	ND		25	3.1	ug/L			10/24/19 12:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/19 12:09	1
Methylene bromide	ND		5.0	0.59	ug/L			10/24/19 12:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/19 12:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/19 12:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/24/19 12:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/24/19 12:09	1
Naphthalene	ND		1.0	1.0	ug/L			10/24/19 12:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/19 12:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/19 12:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/19 12:09	1
o-Xylene	ND		5.0	0.60	ug/L			10/24/19 12:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/19 12:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/19 12:09	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/24/19 12:09	1
Styrene	ND		1.0	1.0	ug/L			10/24/19 12:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/19 12:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/24/19 12:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/24/19 12:09	1
Toluene	ND		1.0	0.41	ug/L			10/24/19 12:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/19 12:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/24/19 12:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/19 12:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/24/19 12:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/24/19 12:09	1
Trichloroethene	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/24/19 12:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/19 12:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/19 12:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/19 12:09	1
Vinyl acetate	ND		25	2.0	ug/L			10/24/19 12:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/19 12:09	1
Xylenes, Total	ND		10	1.6	ug/L			10/24/19 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*10/24/19 12:09*	*1*
Dibromofluoromethane	*110*		*81 - 121*		*10/24/19 12:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/24/19 12:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462942/1002
Matrix: Water
Analysis Batch: 462942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	241		ug/L		121	43 - 160
Acrolein	500	668		ug/L		134	38 - 160
Acrylonitrile	500	601		ug/L		120	64 - 142
Benzene	50.0	53.7		ug/L		107	70 - 130
Bromobenzene	50.0	52.2		ug/L		104	70 - 132
Bromochloromethane	50.0	52.5		ug/L		105	70 - 130
Bromodichloromethane	50.0	56.6		ug/L		113	67 - 133
Bromoform	50.0	64.1		ug/L		128	57 - 140
Bromomethane	50.0	62.9		ug/L		126	10 - 160
2-Butanone (MEK)	200	233		ug/L		117	61 - 145
Carbon disulfide	50.0	47.5		ug/L		95	61 - 137
Carbon tetrachloride	50.0	55.0		ug/L		110	61 - 137
Chlorobenzene	50.0	52.6		ug/L		105	70 - 130
Dibromochloromethane	50.0	48.6		ug/L		97	67 - 135
Chloroethane	50.0	54.1		ug/L		108	55 - 141
2-Chloroethyl vinyl ether	50.0	56.3		ug/L		113	10 - 160
Chloroform	50.0	52.8		ug/L		106	69 - 130
1-Chlorohexane	50.0	52.6		ug/L		105	69 - 130
Chloromethane	50.0	42.4		ug/L		85	58 - 137
cis-1,2-Dichloroethene	50.0	55.0		ug/L		110	68 - 130
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	69 - 132
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	33.9		ug/L		68	41 - 146
1,1-Dichloroethane	50.0	55.6		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	52.4		ug/L		105	69 - 130
1,1-Dichloroethene	50.0	52.3		ug/L		105	63 - 134
1,2-Dichloropropane	50.0	55.4		ug/L		111	70 - 130
1,3-Dichloropropane	50.0	51.9		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	53.9		ug/L		108	52 - 135
1,1-Dichloropropene	50.0	54.2		ug/L		108	70 - 130
Ethylbenzene	50.0	52.6		ug/L		105	70 - 130
Ethyl methacrylate	50.0	55.0		ug/L		110	68 - 130
Hexachlorobutadiene	50.0	58.3		ug/L		117	53 - 140
2-Hexanone	200	248		ug/L		124	65 - 137
Isopropylbenzene	50.0	47.6		ug/L		95	70 - 130
Methylene bromide	50.0	57.7		ug/L		115	70 - 130
Methylene Chloride	50.0	50.6		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	253		ug/L		126	69 - 138
Methyl tert-butyl ether	50.0	49.3		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	53.0		ug/L		106	70 - 130
Naphthalene	50.0	40.3		ug/L		81	47 - 149
n-Butylbenzene	50.0	47.3		ug/L		95	67 - 130
N-Propylbenzene	50.0	50.2		ug/L		100	70 - 130
o-Chlorotoluene	50.0	54.8		ug/L		110	70 - 130
o-Xylene	50.0	52.1		ug/L		104	70 - 130
p-Chlorotoluene	50.0	50.5		ug/L		101	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462942/1002
Matrix: Water
Analysis Batch: 462942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	48.1		ug/L		96	65 - 130
sec-Butylbenzene	50.0	49.2		ug/L		98	66 - 130
Styrene	50.0	52.8		ug/L		106	70 - 130
tert-Butylbenzene	50.0	47.3		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.2		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.5		ug/L		111	70 - 131
Tetrachloroethene	50.0	47.6		ug/L		95	65 - 130
Toluene	50.0	51.6		ug/L		103	70 - 130
trans-1,2-Dichloroethene	50.0	54.8		ug/L		110	70 - 130
trans-1,3-Dichloropropene	50.0	48.1		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	45.3		ug/L		91	60 - 138
1,2,4-Trichlorobenzene	50.0	48.8		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	55.0		ug/L		110	68 - 130
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	70 - 130
Trichloroethene	50.0	50.4		ug/L		101	70 - 130
Trichlorofluoromethane	50.0	59.9		ug/L		120	65 - 138
1,2,3-Trichloropropane	50.0	54.1		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	50.0	49.2		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	50.0	48.6		ug/L		97	69 - 130
Vinyl acetate	100	130		ug/L		130	26 - 160
Vinyl chloride	50.0	54.8		ug/L		110	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*107*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 400-463113/4
Matrix: Water
Analysis Batch: 463113

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.50	ug/L			10/25/19 10:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/25/19 10:00	1
o-Xylene	ND		5.0	0.60	ug/L			10/25/19 10:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/25/19 10:00	1
Xylenes, Total	ND		10	1.6	ug/L			10/25/19 10:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*10/25/19 10:00*	*1*
Dibromofluoromethane	*109*		*81 - 121*		*10/25/19 10:00*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/25/19 10:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-463113/1002
Matrix: Water
Analysis Batch: 463113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	50.0	53.1		ug/L		106	70 - 130
m-Xylene & p-Xylene	50.0	53.6		ug/L		107	70 - 130
o-Xylene	50.0	52.6		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	47.7		ug/L		95	70 - 130
Xylenes, Total	100	106		ug/L		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*78 - 118*
Dibromofluoromethane	*104*		*81 - 121*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: MB 400-463326/5
Matrix: Water
Analysis Batch: 463326

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/27/19 09:30	1
Acrolein	ND		20	10	ug/L			10/27/19 09:30	1
Acrylonitrile	ND		10	2.8	ug/L			10/27/19 09:30	1
Benzene	ND		1.0	0.38	ug/L			10/27/19 09:30	1
Bromobenzene	ND		1.0	0.54	ug/L			10/27/19 09:30	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/27/19 09:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Bromoform	ND		5.0	0.71	ug/L			10/27/19 09:30	1
Bromomethane	ND		1.0	0.98	ug/L			10/27/19 09:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/27/19 09:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Chloroethane	ND		1.0	0.76	ug/L			10/27/19 09:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/27/19 09:30	1
Chloroform	ND		1.0	0.60	ug/L			10/27/19 09:30	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/27/19 09:30	1
Chloromethane	ND		1.0	0.83	ug/L			10/27/19 09:30	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/27/19 09:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/27/19 09:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/27/19 09:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/27/19 09:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/27/19 09:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-463326/5
Matrix: Water
Analysis Batch: 463326

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/27/19 09:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/27/19 09:30	1
2-Hexanone	ND		25	3.1	ug/L			10/27/19 09:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/27/19 09:30	1
Methylene bromide	ND		5.0	0.59	ug/L			10/27/19 09:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/27/19 09:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/27/19 09:30	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/27/19 09:30	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/27/19 09:30	1
Naphthalene	ND		1.0	1.0	ug/L			10/27/19 09:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/27/19 09:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/27/19 09:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/27/19 09:30	1
o-Xylene	ND		5.0	0.60	ug/L			10/27/19 09:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/27/19 09:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/27/19 09:30	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/27/19 09:30	1
Styrene	ND		1.0	1.0	ug/L			10/27/19 09:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/27/19 09:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/27/19 09:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/27/19 09:30	1
Toluene	ND		1.0	0.41	ug/L			10/27/19 09:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/27/19 09:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/27/19 09:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/27/19 09:30	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/27/19 09:30	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/27/19 09:30	1
Trichloroethene	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/27/19 09:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/27/19 09:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/27/19 09:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/27/19 09:30	1
Vinyl acetate	ND		25	2.0	ug/L			10/27/19 09:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/27/19 09:30	1
Xylenes, Total	ND		10	1.6	ug/L			10/27/19 09:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*78 - 118*		*10/27/19 09:30*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*10/27/19 09:30*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/27/19 09:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-463326/1002
Matrix: Water
Analysis Batch: 463326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	187		ug/L		93	43 - 160
Acrolein	500	462		ug/L		92	38 - 160
Acrylonitrile	500	399		ug/L		80	64 - 142
Benzene	50.0	51.3		ug/L		103	70 - 130
Bromobenzene	50.0	50.0		ug/L		100	70 - 132
Bromochloromethane	50.0	48.2		ug/L		96	70 - 130
Bromodichloromethane	50.0	63.4		ug/L		127	67 - 133
Bromoform	50.0	68.3		ug/L		137	57 - 140
Bromomethane	50.0	88.1	*	ug/L		176	10 - 160
2-Butanone (MEK)	200	231		ug/L		116	61 - 145
Carbon disulfide	50.0	46.4		ug/L		93	61 - 137
Carbon tetrachloride	50.0	65.3		ug/L		131	61 - 137
Chlorobenzene	50.0	47.3		ug/L		95	70 - 130
Dibromochloromethane	50.0	48.4		ug/L		97	67 - 135
Chloroethane	50.0	52.0		ug/L		104	55 - 141
2-Chloroethyl vinyl ether	50.0	49.2		ug/L		98	10 - 160
Chloroform	50.0	57.5		ug/L		115	69 - 130
1-Chlorohexane	50.0	39.0		ug/L		78	69 - 130
Chloromethane	50.0	29.0		ug/L		58	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	54.7		ug/L		109	69 - 132
1,2-Dichlorobenzene	50.0	44.6		ug/L		89	67 - 130
1,3-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 130
Dichlorodifluoromethane	50.0	39.1		ug/L		78	41 - 146
1,1-Dichloroethane	50.0	48.1		ug/L		96	70 - 130
1,2-Dichloroethane	50.0	53.6		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	51.4		ug/L		103	63 - 134
1,2-Dichloropropane	50.0	44.1		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	51.3		ug/L		103	70 - 130
2,2-Dichloropropane	50.0	66.2		ug/L		132	52 - 135
1,1-Dichloropropene	50.0	55.7		ug/L		111	70 - 130
Ethylbenzene	50.0	51.5		ug/L		103	70 - 130
Ethyl methacrylate	50.0	54.8		ug/L		110	68 - 130
Hexachlorobutadiene	50.0	64.7		ug/L		129	53 - 140
2-Hexanone	200	169		ug/L		84	65 - 137
Isopropylbenzene	50.0	46.9		ug/L		94	70 - 130
Methylene bromide	50.0	52.7		ug/L		105	70 - 130
Methylene Chloride	50.0	46.1		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	168		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	57.1		ug/L		114	66 - 130
m-Xylene & p-Xylene	50.0	53.0		ug/L		106	70 - 130
Naphthalene	50.0	38.6		ug/L		77	47 - 149
n-Butylbenzene	50.0	42.3		ug/L		85	67 - 130
N-Propylbenzene	50.0	47.1		ug/L		94	70 - 130
o-Chlorotoluene	50.0	52.7		ug/L		105	70 - 130
o-Xylene	50.0	51.2		ug/L		102	70 - 130
p-Chlorotoluene	50.0	49.1		ug/L		98	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-463326/1002
Matrix: Water
Analysis Batch: 463326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	46.7		ug/L		93	65 - 130
sec-Butylbenzene	50.0	45.7		ug/L		91	66 - 130
Styrene	50.0	49.9		ug/L		100	70 - 130
tert-Butylbenzene	50.0	48.4		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.1		ug/L		98	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.9		ug/L		98	70 - 131
Tetrachloroethene	50.0	46.8		ug/L		94	65 - 130
Toluene	50.0	48.1		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	70 - 130
trans-1,3-Dichloropropene	50.0	56.4		ug/L		113	63 - 130
1,2,3-Trichlorobenzene	50.0	45.3		ug/L		91	60 - 138
1,2,4-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	65.1		ug/L		130	68 - 130
1,1,2-Trichloroethane	50.0	47.7		ug/L		95	70 - 130
Trichloroethene	50.0	45.9		ug/L		92	70 - 130
Trichlorofluoromethane	50.0	72.6	*	ug/L		145	65 - 138
1,2,3-Trichloropropane	50.0	55.3		ug/L		111	70 - 130
1,2,4-Trimethylbenzene	50.0	46.2		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	50.0	47.6		ug/L		95	69 - 130
Vinyl acetate	100	148		ug/L		148	26 - 160
Vinyl chloride	50.0	44.0		ug/L		88	59 - 136
Xylenes, Total	100	104		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*78 - 118*
Dibromofluoromethane	*107*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzenethiol	ND		10	1.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzoic acid	ND		30	7.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzyl alcohol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/21/19 10:59	10/23/19 21:01	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/21/19 10:59	10/23/19 21:01	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloroaniline	ND		10	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chlorophenol	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenzofuran	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Diethyl phthalate	ND		10	0.70	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/21/19 10:59	10/23/19 21:01	1
1,4-Dioxane	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachloroethane	ND		10	4.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Indene	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Isophorone	ND		10	0.57	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Methylphenol	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitroaniline	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
3-Nitroaniline	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitroaniline	ND		10	2.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Nitrobenzene	ND		10	0.55	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitrophenol	ND		10	0.65	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitrophenol	ND		10	2.1	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pentachlorophenol	ND		20	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Phenol	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pyridine	ND		10	3.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Quinoline	ND		10	6.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2-Fluorophenol	*33*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Phenol-d5	*56*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Terphenyl-d14	*80*		*53 - 125*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*10/21/19 10:59*	*10/23/19 21:01*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	10.7		ug/L		36	29 - 120
Benzoic acid	117	69.5		ug/L		60	10 - 150
Benzyl alcohol	30.0	9.76	J	ug/L		33	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.0		ug/L		70	45 - 120
Bis(2-chloroethyl)ether	30.0	32.3		ug/L		108	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.6		ug/L		69	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	19.2		ug/L		64	48 - 150
4-Bromophenyl phenyl ether	30.0	17.3		ug/L		58	55 - 122
Butyl benzyl phthalate	30.0	19.4		ug/L		65	46 - 145
4-Chloroaniline	30.0	19.1		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	20.8		ug/L		69	39 - 140
2-Chloronaphthalene	30.0	17.7		ug/L		59	52 - 120
2-Chlorophenol	30.0	11.8		ug/L		39	34 - 120
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124
Dibenz[a,h]acridine	30.0	17.2		ug/L		57	46 - 149
Dibenzofuran	30.0	19.3		ug/L		64	58 - 123
3,3'-Dichlorobenzidine	40.0	30.7		ug/L		77	39 - 135
2,4-Dichlorophenol	30.0	16.9		ug/L		56	39 - 128
Diethyl phthalate	30.0	22.6		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	20.0		ug/L		67	44 - 120
Dimethyl phthalate	30.0	20.7		ug/L		69	50 - 131
Di-n-butyl phthalate	30.0	19.5		ug/L		65	55 - 131
4,6-Dinitro-ortho-cresol	60.0	42.7		ug/L		71	10 - 150
2,4-Dinitrophenol	60.0	48.4		ug/L		81	10 - 150
2,4-Dinitrotoluene	30.0	22.9		ug/L		76	58 - 140
2,6-Dinitrotoluene	30.0	21.0		ug/L		70	57 - 130
Di-n-octyl phthalate	30.0	19.6		ug/L		65	50 - 150
1,4-Dioxane	30.0	12.3		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	19.7		ug/L		66	47 - 123
Hexachlorobenzene	30.0	17.9		ug/L		60	52 - 131
Hexachlorocyclopentadiene	30.0	8.44	J	ug/L		28	10 - 129
Hexachloroethane	30.0	15.7		ug/L		52	41 - 120
Indene	30.0	18.3		ug/L		61	47 - 120
Isophorone	30.0	20.8		ug/L		69	49 - 120
2-Methylphenol	30.0	21.4		ug/L		71	39 - 123
3 & 4 Methylphenol	30.0	17.3	J	ug/L		58	38 - 121
2-Nitroaniline	30.0	22.4		ug/L		75	47 - 150
3-Nitroaniline	30.0	20.0		ug/L		67	34 - 132
4-Nitroaniline	30.0	23.5		ug/L		78	41 - 135
Nitrobenzene	30.0	20.8		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136
4-Nitrophenol	60.0	41.4		ug/L		69	10 - 150
N-Nitrosodimethylamine	30.0	22.1		ug/L		74	22 - 148
N-Nitrosodi-n-propylamine	30.0	23.5		ug/L		78	44 - 120
N-Nitrosodiphenylamine	29.8	19.3		ug/L		65	56 - 120
Pentachlorophenol	60.0	34.6		ug/L		58	15 - 141
Phenol	30.0	11.5		ug/L		38	33 - 120
Pyridine	60.0	34.3		ug/L		57	26 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	30.0	19.9		ug/L		66	51 - 129
2,4,5-Trichlorophenol	30.0	19.0		ug/L		63	38 - 147
2,4,6-Trichlorophenol	30.0	16.9		ug/L		56	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*16*		*10 - 120*
Nitrobenzene-d5	*69*		*27 - 120*
Phenol-d5	*38*		*10 - 120*
Terphenyl-d14	*68*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

Lab Sample ID: LCS 400-462401/4-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

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	*81*		*34 - 120*
2-Fluorophenol	*22*		*10 - 120*
Nitrobenzene-d5	*71*		*27 - 120*
Phenol-d5	*41*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*64*		*15 - 135*

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	14.4		ug/L		48	29 - 120	29	30
Benzoic acid	117	89.2		ug/L		77	10 - 150	25	30
Benzyl alcohol	30.0	10.9		ug/L		36	19 - 125	11	30
Bis(2-chloroethoxy)methane	30.0	23.1		ug/L		77	45 - 120	10	30
Bis(2-chloroethyl)ether	30.0	33.8		ug/L		113	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	23.5		ug/L		78	30 - 125	13	30
Bis(2-ethylhexyl) phthalate	30.0	22.3		ug/L		74	48 - 150	15	30
4-Bromophenyl phenyl ether	30.0	20.3		ug/L		68	55 - 122	16	30
Butyl benzyl phthalate	30.0	22.4		ug/L		75	46 - 145	14	30
4-Chloroaniline	30.0	16.0		ug/L		53	30 - 120	18	30
4-Chloro-3-methylphenol	30.0	24.0		ug/L		80	39 - 140	14	30
2-Chloronaphthalene	30.0	22.1		ug/L		74	52 - 120	22	30
2-Chlorophenol	30.0	20.3	*	ug/L		68	34 - 120	53	30
4-Chlorophenyl phenyl ether	30.0	21.3		ug/L		71	58 - 124	17	30
Dibenz[a,h]acridine	30.0	21.3		ug/L		71	46 - 149	21	30
Dibenzofuran	30.0	22.9		ug/L		76	58 - 123	17	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	35.4		ug/L		88	39 - 135	14	30
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128	30	30
Diethyl phthalate	30.0	25.9		ug/L		86	44 - 146	14	30
2,4-Dimethylphenol	30.0	23.7		ug/L		79	44 - 120	17	30
Dimethyl phthalate	30.0	23.7		ug/L		79	50 - 131	13	30
Di-n-butyl phthalate	30.0	22.7		ug/L		76	55 - 131	15	30
4,6-Dinitro-ortho-cresol	60.0	50.9		ug/L		85	10 - 150	18	30
2,4-Dinitrophenol	60.0	55.5		ug/L		92	10 - 150	14	30
2,4-Dinitrotoluene	30.0	25.8		ug/L		86	58 - 140	12	30
2,6-Dinitrotoluene	30.0	24.3		ug/L		81	57 - 130	15	30
Di-n-octyl phthalate	30.0	23.4		ug/L		78	50 - 150	18	30
1,4-Dioxane	30.0	14.7		ug/L		49	25 - 120	18	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.2		ug/L		77	47 - 123	16	30
Hexachlorobenzene	30.0	21.1		ug/L		70	52 - 131	16	30
Hexachlorocyclopentadiene	30.0	11.7	J *	ug/L		39	10 - 129	33	30
Hexachloroethane	30.0	20.1		ug/L		67	41 - 120	25	30
Indene	30.0	23.1		ug/L		77	47 - 120	23	30
Isophorone	30.0	23.0		ug/L		77	49 - 120	10	30
2-Methylphenol	30.0	28.7		ug/L		96	39 - 123	29	30
3 & 4 Methylphenol	30.0	23.7	*	ug/L		79	38 - 121	32	30
2-Nitroaniline	30.0	25.8		ug/L		86	47 - 150	14	30
3-Nitroaniline	30.0	22.4		ug/L		75	34 - 132	11	30
4-Nitroaniline	30.0	26.5		ug/L		88	41 - 135	12	30
Nitrobenzene	30.0	23.2		ug/L		77	47 - 120	11	30
2-Nitrophenol	30.0	23.9		ug/L		80	28 - 136	27	30
4-Nitrophenol	60.0	45.5		ug/L		76	10 - 150	9	30
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148	14	30
N-Nitrosodi-n-propylamine	30.0	26.7		ug/L		89	44 - 120	13	30
N-Nitrosodiphenylamine	29.8	22.3		ug/L		75	56 - 120	15	30
Pentachlorophenol	60.0	41.8		ug/L		70	15 - 141	19	30
Phenol	30.0	22.2	*	ug/L		74	33 - 120	64	30
Pyridine	60.0	41.0		ug/L		68	26 - 120	18	30
Quinoline	30.0	22.8		ug/L		76	51 - 129	13	30
2,4,5-Trichlorophenol	30.0	22.8		ug/L		76	38 - 147	18	30
2,4,6-Trichlorophenol	30.0	22.4		ug/L		75	36 - 139	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*62*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*70*		*15 - 135*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-462401/5-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol			30.0	ND	*	ug/L		2	10 - 120	90	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*15*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*34*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*
2,4,6-Tribromophenol	*72*		*15 - 135*

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
Benzenethiol	ND		10	1.7	ug/L		10/22/19 10:51	11/02/19 10:13	1
Benzoic acid	ND		30	7.3	ug/L		10/22/19 10:51	11/02/19 10:13	1
Benzyl alcohol	ND		10	2.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/22/19 10:51	11/02/19 10:13	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/22/19 10:51	11/02/19 10:13	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/22/19 10:51	11/02/19 10:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/22/19 10:51	11/02/19 10:13	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Chloroaniline	ND		10	3.4	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Chlorophenol	ND		10	2.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Dibenzofuran	ND		10	0.52	ug/L		10/22/19 10:51	11/02/19 10:13	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Diethyl phthalate	ND		10	0.70	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/22/19 10:51	11/02/19 10:13	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/22/19 10:51	11/02/19 10:13	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/22/19 10:51	11/02/19 10:13	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/22/19 10:51	11/02/19 10:13	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/22/19 10:51	11/02/19 10:13	1
1,4-Dioxane	ND		10	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/22/19 10:51	11/02/19 10:13	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/22/19 10:51	11/02/19 10:13	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		10	4.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
Indene	ND		10	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
Isophorone	ND		10	0.57	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Methylphenol	ND		10	1.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Nitroaniline	ND		10	2.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
3-Nitroaniline	ND		10	1.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Nitroaniline	ND		10	2.5	ug/L		10/22/19 10:51	11/02/19 10:13	1
Nitrobenzene	ND		10	0.55	ug/L		10/22/19 10:51	11/02/19 10:13	1
2-Nitrophenol	ND		10	0.65	ug/L		10/22/19 10:51	11/02/19 10:13	1
4-Nitrophenol	ND		10	2.1	ug/L		10/22/19 10:51	11/02/19 10:13	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/22/19 10:51	11/02/19 10:13	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/22/19 10:51	11/02/19 10:13	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/22/19 10:51	11/02/19 10:13	1
Pentachlorophenol	ND		20	1.8	ug/L		10/22/19 10:51	11/02/19 10:13	1
Phenol	ND		10	2.6	ug/L		10/22/19 10:51	11/02/19 10:13	1
Pyridine	ND		10	3.2	ug/L		10/22/19 10:51	11/02/19 10:13	1
Quinoline	ND		10	6.0	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/22/19 10:51	11/02/19 10:13	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/22/19 10:51	11/02/19 10:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*34 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
2-Fluorophenol	*51*		*10 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
Nitrobenzene-d5	*105*		*27 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
Phenol-d5	*92*		*10 - 120*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
Terphenyl-d14	*116*		*53 - 125*	*10/22/19 10:51*	*11/02/19 10:13*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*10/22/19 10:51*	*11/02/19 10:13*	*1*

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	29.9		ug/L		100	29 - 120
Benzoic acid	117	105		ug/L		90	10 - 150
Benzyl alcohol	30.0	28.4		ug/L		95	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.6		ug/L		79	45 - 120
Bis(2-chloroethyl)ether	30.0	21.3		ug/L		71	48 - 120
bis (2-chloroisopropyl) ether	30.0	23.1		ug/L		77	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	21.1		ug/L		70	48 - 150
4-Bromophenyl phenyl ether	30.0	25.7		ug/L		86	55 - 122
Butyl benzyl phthalate	30.0	24.4		ug/L		81	46 - 145
4-Chloroaniline	30.0	25.8		ug/L		86	30 - 120
4-Chloro-3-methylphenol	30.0	27.7		ug/L		92	39 - 140
2-Chloronaphthalene	30.0	23.9		ug/L		80	52 - 120
2-Chlorophenol	30.0	21.6		ug/L		72	34 - 120
4-Chlorophenyl phenyl ether	30.0	23.5		ug/L		78	58 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz[a,h]acridine	30.0	18.3		ug/L		61	46 - 149
Dibenzofuran	30.0	24.2		ug/L		81	58 - 123
3,3'-Dichlorobenzidine	40.0	45.4		ug/L		114	39 - 135
2,4-Dichlorophenol	30.0	24.7		ug/L		82	39 - 128
Diethyl phthalate	30.0	26.6		ug/L		89	44 - 146
2,4-Dimethylphenol	30.0	24.2		ug/L		81	44 - 120
Dimethyl phthalate	30.0	26.8		ug/L		89	50 - 131
Di-n-butyl phthalate	30.0	22.8		ug/L		76	55 - 131
4,6-Dinitro-ortho-cresol	60.0	63.2		ug/L		105	10 - 150
2,4-Dinitrophenol	60.0	71.3		ug/L		119	10 - 150
2,4-Dinitrotoluene	30.0	29.1		ug/L		97	58 - 140
2,6-Dinitrotoluene	30.0	29.3		ug/L		98	57 - 130
Di-n-octyl phthalate	30.0	24.6		ug/L		82	50 - 150
1,4-Dioxane	30.0	16.2		ug/L		54	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.8		ug/L		79	47 - 123
Hexachlorobenzene	30.0	24.9		ug/L		83	52 - 131
Hexachlorocyclopentadiene	30.0	11.7	J	ug/L		39	10 - 129
Hexachloroethane	30.0	16.2		ug/L		54	41 - 120
Indene	30.0	24.8		ug/L		83	47 - 120
Isophorone	30.0	25.0		ug/L		83	49 - 120
2-Methylphenol	30.0	25.9		ug/L		86	39 - 123
3 & 4 Methylphenol	30.0	24.6		ug/L		82	38 - 121
2-Nitroaniline	30.0	28.9		ug/L		96	47 - 150
3-Nitroaniline	30.0	32.7		ug/L		109	34 - 132
4-Nitroaniline	30.0	32.5		ug/L		108	41 - 135
Nitrobenzene	30.0	24.6		ug/L		82	47 - 120
2-Nitrophenol	30.0	26.5		ug/L		88	28 - 136
4-Nitrophenol	60.0	62.2		ug/L		104	10 - 150
N-Nitrosodimethylamine	30.0	26.3		ug/L		88	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.4		ug/L		81	44 - 120
N-Nitrosodiphenylamine	29.8	27.1		ug/L		91	56 - 120
Pentachlorophenol	60.0	55.3		ug/L		92	15 - 141
Phenol	30.0	21.6		ug/L		72	33 - 120
Pyridine	60.0	40.5		ug/L		68	26 - 120
Quinoline	30.0	27.9		ug/L		93	51 - 129
2,4,5-Trichlorophenol	30.0	30.2		ug/L		101	38 - 147
2,4,6-Trichlorophenol	30.0	29.5		ug/L		98	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*88*		*27 - 120*
Phenol-d5	*78*		*10 - 120*
Terphenyl-d14	*91*		*53 - 125*
2,4,6-Tribromophenol	*99*		*15 - 135*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462605/6-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

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	*86*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*93*		*27 - 120*
Phenol-d5	*75*		*10 - 120*
Terphenyl-d14	*99*		*53 - 125*
2,4,6-Tribromophenol	*44*		*15 - 135*

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	31.3		ug/L		104	29 - 120	5	30
Benzoic acid	117	120		ug/L		103	10 - 150	13	30
Benzyl alcohol	30.0	31.5		ug/L		105	19 - 125	10	30
Bis(2-chloroethoxy)methane	30.0	25.7		ug/L		86	45 - 120	8	30
Bis(2-chloroethyl)ether	30.0	23.3		ug/L		78	48 - 120	9	30
bis (2-chloroisopropyl) ether	30.0	24.5		ug/L		82	30 - 125	6	30
Bis(2-ethylhexyl) phthalate	30.0	24.2		ug/L		81	48 - 150	14	30
4-Bromophenyl phenyl ether	30.0	27.4		ug/L		91	55 - 122	6	30
Butyl benzyl phthalate	30.0	25.5		ug/L		85	46 - 145	5	30
4-Chloroaniline	30.0	24.8		ug/L		83	30 - 120	4	30
4-Chloro-3-methylphenol	30.0	30.3		ug/L		101	39 - 140	9	30
2-Chloronaphthalene	30.0	25.1		ug/L		84	52 - 120	5	30
2-Chlorophenol	30.0	25.4		ug/L		85	34 - 120	16	30
4-Chlorophenyl phenyl ether	30.0	24.2		ug/L		81	58 - 124	3	30
Dibenz[a,h]acridine	30.0	19.8		ug/L		66	46 - 149	8	30
Dibenzofuran	30.0	25.8		ug/L		86	58 - 123	6	30
3,3'-Dichlorobenzidine	40.0	48.2		ug/L		121	39 - 135	6	30
2,4-Dichlorophenol	30.0	27.3		ug/L		91	39 - 128	10	30
Diethyl phthalate	30.0	28.1		ug/L		94	44 - 146	6	30
2,4-Dimethylphenol	30.0	26.0		ug/L		87	44 - 120	7	30
Dimethyl phthalate	30.0	28.3		ug/L		94	50 - 131	6	30
Di-n-butyl phthalate	30.0	23.7		ug/L		79	55 - 131	4	30
4,6-Dinitro-ortho-cresol	60.0	67.2		ug/L		112	10 - 150	6	30
2,4-Dinitrophenol	60.0	74.4		ug/L		124	10 - 150	4	30
2,4-Dinitrotoluene	30.0	30.7		ug/L		102	58 - 140	5	30
2,6-Dinitrotoluene	30.0	30.8		ug/L		103	57 - 130	5	30
Di-n-octyl phthalate	30.0	25.2		ug/L		84	50 - 150	2	30
1,4-Dioxane	30.0	19.0		ug/L		63	25 - 120	16	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	26.4		ug/L		88	47 - 123	10	30
Hexachlorobenzene	30.0	25.4		ug/L		85	52 - 131	2	30
Hexachlorocyclopentadiene	30.0	11.6	J	ug/L		39	10 - 129	1	30
Hexachloroethane	30.0	18.1		ug/L		60	41 - 120	11	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	30.0	26.7		ug/L		89	47 - 120	7	30
Isophorone	30.0	27.0		ug/L		90	49 - 120	8	30
2-Methylphenol	30.0	28.3		ug/L		94	39 - 123	9	30
3 & 4 Methylphenol	30.0	27.0		ug/L		90	38 - 121	9	30
2-Nitroaniline	30.0	30.8		ug/L		103	47 - 150	6	30
3-Nitroaniline	30.0	35.0		ug/L		117	34 - 132	7	30
4-Nitroaniline	30.0	34.8		ug/L		116	41 - 135	7	30
Nitrobenzene	30.0	26.9		ug/L		90	47 - 120	9	30
2-Nitrophenol	30.0	29.7		ug/L		99	28 - 136	11	30
4-Nitrophenol	60.0	64.8		ug/L		108	10 - 150	4	30
N-Nitrosodimethylamine	30.0	29.2		ug/L		97	22 - 148	11	30
N-Nitrosodi-n-propylamine	30.0	25.9		ug/L		86	44 - 120	6	30
N-Nitrosodiphenylamine	29.8	29.7		ug/L		100	56 - 120	9	30
Pentachlorophenol	60.0	61.5		ug/L		102	15 - 141	11	30
Phenol	30.0	24.7		ug/L		82	33 - 120	13	30
Pyridine	60.0	45.1		ug/L		75	26 - 120	11	30
Quinoline	30.0	30.9		ug/L		103	51 - 129	10	30
2,4,5-Trichlorophenol	30.0	32.8		ug/L		109	38 - 147	8	30
2,4,6-Trichlorophenol	30.0	32.2		ug/L		107	36 - 139	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*34 - 120*
2-Fluorophenol	*55*		*10 - 120*
Nitrobenzene-d5	*98*		*27 - 120*
Phenol-d5	*90*		*10 - 120*
Terphenyl-d14	*99*		*53 - 125*
2,4,6-Tribromophenol	*105*		*15 - 135*

Lab Sample ID: LCSD 400-462605/7-A
Matrix: Water
Analysis Batch: 464293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*34 - 120*
2-Fluorophenol	*19*		*10 - 120*
Nitrobenzene-d5	*90*		*27 - 120*
Phenol-d5	*64*		*10 - 120*
Terphenyl-d14	*96*		*53 - 125*
2,4,6-Tribromophenol	*26*		*15 - 135*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Anthracene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Chrysene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluoranthene	0.0233	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluorene	ND		0.20	0.021	ug/L		10/21/19 10:59	10/23/19 09:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Phenanthrene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Pyrene	0.0235	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*71*		*33 - 138*	*10/21/19 10:59*	*10/23/19 09:56*	*1*
2-Fluorobiphenyl	*69*		*15 - 122*	*10/21/19 10:59*	*10/23/19 09:56*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*10/21/19 10:59*	*10/23/19 09:56*	*1*

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.6		ug/L		85	41 - 120
Acenaphthylene	30.0	27.9		ug/L		93	44 - 120
Anthracene	30.0	24.4		ug/L		81	49 - 120
Benzo[a]anthracene	30.0	23.8		ug/L		79	61 - 135
Benzo[a]pyrene	30.0	25.6		ug/L		85	52 - 120
Benzo[b]fluoranthene	30.0	26.7		ug/L		89	53 - 134
Benzo[g,h,i]perylene	30.0	20.3		ug/L		68	47 - 133
Benzo[k]fluoranthene	30.0	27.0		ug/L		90	57 - 134
Chrysene	30.0	22.8		ug/L		76	55 - 122
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146
Fluoranthene	30.0	24.4		ug/L		81	54 - 128
Fluorene	30.0	26.4		ug/L		88	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.1		ug/L		74	43 - 142
Phenanthrene	30.0	23.6		ug/L		79	48 - 120
Pyrene	30.0	24.9		ug/L		83	48 - 132
1-Methylnaphthalene	30.0	20.8		ug/L		69	41 - 120
2-Methylnaphthalene	30.0	20.3		ug/L		68	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*80*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	77		15 - 122
Nitrobenzene-d5	60		19 - 130

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.2		ug/L		91	41 - 120	6	56
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120	5	56
Anthracene	30.0	25.5		ug/L		85	49 - 120	5	51
Benzo[a]anthracene	30.0	23.1		ug/L		77	61 - 135	3	49
Benzo[a]pyrene	30.0	25.4		ug/L		85	52 - 120	1	50
Benzo[b]fluoranthene	30.0	26.0		ug/L		87	53 - 134	3	54
Benzo[g,h,i]perylene	30.0	20.5		ug/L		68	47 - 133	1	50
Benzo[k]fluoranthene	30.0	27.3		ug/L		91	57 - 134	1	52
Chrysene	30.0	22.4		ug/L		75	55 - 122	2	50
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146	0	50
Fluoranthene	30.0	24.8		ug/L		83	54 - 128	2	52
Fluorene	30.0	26.8		ug/L		89	45 - 125	2	56
Indeno[1,2,3-cd]pyrene	30.0	22.3		ug/L		74	43 - 142	1	51
Phenanthrene	30.0	24.0		ug/L		80	48 - 120	1	56
Pyrene	30.0	24.1		ug/L		80	48 - 132	3	52
1-Methylnaphthalene	30.0	23.2		ug/L		77	41 - 120	11	55
2-Methylnaphthalene	30.0	22.5		ug/L		75	32 - 124	10	57

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	75		33 - 138
2-Fluorobiphenyl	82		15 - 122
Nitrobenzene-d5	57		19 - 130

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Anthracene	0.0388	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[a]anthracene	0.0872	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[a]pyrene	0.0949	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[b]fluoranthene	0.0858	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[g,h,i]perylene	0.0798	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Benzo[k]fluoranthene	0.0982	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Chrysene	0.0787	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Dibenz(a,h)anthracene	0.0892	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Fluoranthene	0.0407	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Fluorene	ND		0.20	0.021	ug/L		10/22/19 10:51	11/04/19 21:03	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-462605/1-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.0998	J	0.20	0.040	ug/L		10/22/19 10:51	11/04/19 21:03	1
Phenanthrene	0.0375	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
Pyrene	0.0452	J	0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/22/19 10:51	11/04/19 21:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*144*	*X*	*33 - 138*	*10/22/19 10:51*	*11/04/19 21:03*	*1*
2-Fluorobiphenyl	*114*		*15 - 122*	*10/22/19 10:51*	*11/04/19 21:03*	*1*
Nitrobenzene-d5	*111*		*19 - 130*	*10/22/19 10:51*	*11/04/19 21:03*	*1*

Lab Sample ID: LCS 400-462605/2-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	27.8		ug/L		93	41 - 120
Acenaphthylene	30.0	27.9		ug/L		93	44 - 120
Anthracene	30.0	28.1		ug/L		94	49 - 120
Benzo[a]anthracene	30.0	26.4		ug/L		88	61 - 135
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120
Benzo[b]fluoranthene	30.0	27.0		ug/L		90	53 - 134
Benzo[g,h,i]perylene	30.0	28.4		ug/L		95	47 - 133
Benzo[k]fluoranthene	30.0	29.0		ug/L		97	57 - 134
Chrysene	30.0	27.1		ug/L		90	55 - 122
Dibenz(a,h)anthracene	30.0	28.5		ug/L		95	48 - 146
Fluoranthene	30.0	28.4		ug/L		95	54 - 128
Fluorene	30.0	29.0		ug/L		97	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	29.5		ug/L		98	43 - 142
Phenanthrene	30.0	26.1		ug/L		87	48 - 120
Pyrene	30.0	28.4		ug/L		95	48 - 132
1-Methylnaphthalene	30.0	21.3		ug/L		71	41 - 120
2-Methylnaphthalene	30.0	20.3		ug/L		68	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*111*		*33 - 138*
2-Fluorobiphenyl	*94*		*15 - 122*
Nitrobenzene-d5	*83*		*19 - 130*

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.4		ug/L		98	41 - 120	6	56
Acenaphthylene	30.0	29.5		ug/L		98	44 - 120	6	56
Anthracene	30.0	29.0		ug/L		97	49 - 120	3	51
Benzo[a]anthracene	30.0	27.2		ug/L		91	61 - 135	3	49

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 400-462605/3-A
Matrix: Water
Analysis Batch: 464437

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462605

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	30.0	27.6		ug/L		92	52 - 120	5	50
Benzo[b]fluoranthene	30.0	28.1		ug/L		94	53 - 134	4	54
Benzo[g,h,i]perylene	30.0	30.7		ug/L		102	47 - 133	8	50
Benzo[k]fluoranthene	30.0	29.2		ug/L		97	57 - 134	1	52
Chrysene	30.0	27.9		ug/L		93	55 - 122	3	50
Dibenz(a,h)anthracene	30.0	30.6		ug/L		102	48 - 146	7	50
Fluoranthene	30.0	29.9		ug/L		100	54 - 128	5	52
Fluorene	30.0	31.3		ug/L		104	45 - 125	8	56
Indeno[1,2,3-cd]pyrene	30.0	31.7		ug/L		106	43 - 142	7	51
Phenanthrene	30.0	27.1		ug/L		90	48 - 120	4	56
Pyrene	30.0	28.5		ug/L		95	48 - 132	1	52
1-Methylnaphthalene	30.0	22.7		ug/L		76	41 - 120	6	55
2-Methylnaphthalene	30.0	21.7		ug/L		72	32 - 124	7	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*116*		*33 - 138*
2-Fluorobiphenyl	*101*		*15 - 122*
Nitrobenzene-d5	*84*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462940/1-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462940

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		10/24/19 08:24	10/24/19 18:42	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/24/19 08:24	10/24/19 18:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*10/24/19 08:24*	*10/24/19 18:42*	*1*

Lab Sample ID: LCS 400-462940/2-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.111		ug/L		111	60 - 140
1,2-Dibromoethane	0.100	0.0993		ug/L		99	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-462940/3-A
Matrix: Water
Analysis Batch: 463064

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462940

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.100	0.112		ug/L		112	60 - 140	0	30
1,2-Dibromoethane			0.100	0.101		ug/L		101	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

400-178067 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
PO #	GSAP Project ID
60592794 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK I
DATE
PAGE

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 - 1.03.004 / 60592794 - 1.03.0044
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
COP 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
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Cc To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com
SAMPLER NAME(S) (Print): B. Howell B. Burleson
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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-101519-8011	10/15/19	0000	Water	X					2			2		
	TB-ROX-101519-B260		0000		X					2	2				
	MW5-ROX-101519		0925		X			X		6	2	1	2	1	
	ROST4RZE-ROX-101519		1040		X			X		6	2	1	2	1	
	MW22-ROX-101519		1135		X			X		6	2	1	2	1	
	MW22-ROX-101519-DUP		1135		X			X		6	2	1	2	1	
	P59-ROX-101519		1320		X			X		6	2	1	2	1	SPLIT SAMPLE
	P57-ROX-101519		1415		X			X		6	2	1	2	1	
	P57-ROX-101519-DUP	↓	1415	↓	X			X		6	2	1	2	1	
											Bob Howell				

Relinquished by: (Signature) Bob Howell	Received by: (Signature) Fedex: 1194 6302 0097 / 1194 6302 0086 / 1194 6302 0053 / 1194 6302 0075 / 1194 6302 0064	Date: 10/15/19	Time: 1630
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature) 0.2°C, 0.4°C, 1.4°C, 0.5°C, 2.0°C IR-8	Date: 10-16-19	Time: 0922

Custody seal #s: 1090699 / 1090698 / 1090697 / 1090696 / 1090695 / 1090694 / 1090701 / 1090700 / 1090693 / 1090692

Version: 14Dec15

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11/12/2019

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 - 1.03.004 / 60592794 - 1.03.0044	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/15/19
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 - 1.03.004 / 60592794 - 1.03.0044
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102 USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Offer ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
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): T. Jones M. D'Angelo
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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-101519-8011-55	10/15/19	0000	Water	X					2			2		Split Sample
	TB-ROX-101519-8260-55	10/15/19	0000		X					2	2				
	P56-ROX-101519	10/15/19	0945		4			2		6	X	X	X	X	
	T12-ROX-101519	10/15/19	1035		4			2		6	X	X	X	X	
	P93A-ROX-101519-EB	10/15/19	1210		4			2		6	X	X	X	X	
	P93A-ROX-101519	10/15/19	1255		4			2		6	X	X	X	X	
	P93D-ROX-101519	10/15/19	1325		4			2		6	X	X	X	X	
	P93B-ROX-101519	10/15/19	1415		4			2		6	X	X	X	X	
	P93B-ROX-101519-DUP	10/15/19	1415		4			2		6	X	X	X	X	

M. D'Angelo 10/15/19

	Received by: (Signature)	Date	Time
Relinquished by: (Signature): M. D'Angelo	Fedex: 1194 6302 0097 1194 6302 0075 1194 6302 0086 1194 6302 0064 1194 6302 0053	10/15/19	1600
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	10-16-19	0922

Custody Seal #: 1090699 / 1090698 1090695 / 1090694 1090693 / 1090692
1090697 / 1090696 1090701 / 1090700

Version: 14Dec15

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11/12/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-178067-1

Login Number: 178067
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	0.2°C 0.4°C 1.4°C 0.5°C 2.6°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 400-178067-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Roxana Groundwater Quarterly – 4th Quarter 2019 Data Review

Laboratory SDG: 400-178067-2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 11/28/2019

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification
ROST4PZE-ROX-101519

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, laboratory case narrative indicated PAHs were detected in the method blank. The SVOC LCS/LCD recoveries for benzenethiol, and several SVOC LCS/LCSD RPDs were outside evaluation criteria. Several VOCs and PAHs in sample ROST4PZE-ROX-101519 were diluted to bring analytes into calibration range of the instrument. The continuing calibration verifications for several SVOCs were outside evaluation criteria, low biased. 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 400-462401/1-A	PAHs	Fluoranthene	0.0233 µg/L
MB 400-462401/1-A	PAHs	Pyrene	0.0235 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.

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 400-462401/2-A/3-A	SVOCs	2-Chlorophenol	39/68	**53**	34-120/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	28/39	**33**	10-129/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	3&4 Methylphenol	58/79	**32**	38-121/30
LCS/LCSD 400-462401/2-A/3-A	SVOCs	Phenol	38/74	**64**	33-120/30
LCS/LCSD 400-462401/4-A/5-A	SVOCs	Benzenethiol	**0.8/2**	**90**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-101519	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for several analytes were outside acceptance criteria, low biased and are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-101519	SVOCs	Benzoic acid	**UJ**
ROST4PZE-ROX-101519	SVOCs	Benzyl alcohol	**UJ**
ROST4PZE-ROX-101519	SVOCs	Indene	**J**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-178067-2
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:
10/24/2019 8:54:16 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 11/28/19 MR

LINKS

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-178067-2

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-178067-2

Comments
Results for sample, ROST4PZE-ROX-101519 (400-178067-4), are reported separately.

Receipt
The samples were received on 10/16/2019 9:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.2° C, 0.4° C, 0.5° C, 1.4° C and 2.6° C.

GC/MS VOA
Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-451121 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: ROST4PZE-ROX-101519 (400-178067-4). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D LL: The method blank for preparation batch 400-462401 and analytical batch 400-462759 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 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: 2-Chlorophenol, 3 & 4 Methylphenol, Hexachlorocyclopentadiene and Phenol.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered above the upper control limit for 2-Methylphenol, Di-n-butyl phthalate and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-462867 recovered outside acceptance criteria, low biased, for Benzoic acid, Benzyl alcohol and Indene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 400-462401 and analytical batch 400-462867 recovered outside control limits for the following analytes: Benzenethiol.

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.

Job ID: 400-178067-2 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-178067-4	ROST4PZE-ROX-101519	Water	10/15/19 10:40	10/16/19 09:22	

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-2

Client Sample ID: ROST4PZE-ROX-101519

Lab Sample ID: 400-178067-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	190		1.0	0.38	ug/L	1		8260B	Total/NA
Carbon disulfide	0.65	J	1.0	0.50	ug/L	1		8260B	Total/NA
Chlorobenzene	0.57	J	1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	17		1.0	0.53	ug/L	1		8260B	Total/NA
Naphthalene	160		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	25		1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.1		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.9		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	58		1.0	0.41	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	39		1.0	0.56	ug/L	1		8260B	Total/NA
Ethylbenzene - DL	520		5.0	2.5	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene - DL	640		25	8.0	ug/L	5		8260B	Total/NA
o-Xylene - DL	130		25	3.0	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	220		5.0	4.1	ug/L	5		8260B	Total/NA
Xylenes, Total - DL	770		50	8.0	ug/L	5		8260B	Total/NA
Acenaphthene	2.0		0.19	0.019	ug/L	1		8270D LL	Total/NA
Anthracene	1.1		0.19	0.019	ug/L	1		8270D LL	Total/NA
Benzo[a]anthracene	0.041	J	0.19	0.038	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.12	J B	0.19	0.019	ug/L	1		8270D LL	Total/NA
Fluorene	1.6		0.19	0.020	ug/L	1		8270D LL	Total/NA
Phenanthrene	5.7		0.19	0.019	ug/L	1		8270D LL	Total/NA
Pyrene	0.36	B	0.19	0.019	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	53		0.95	0.095	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	59		0.95	0.095	ug/L	5		8270D LL	Total/NA
Dibenzofuran	1.8	J	9.5	0.49	ug/L	1		8270D	Total/NA
Indene	5.9	J	9.5	0.95	ug/L	1		8270D	Total/NA
Phenol	4.2	J *	9.5	2.5	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZE-ROX-101519
Date Collected: 10/15/19 10:40
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-4
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			10/23/19 10:10	1
Acrolein	ND		20	10	ug/L			10/23/19 10:10	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 10:10	1
Benzene	**190**		1.0	0.38	ug/L			10/23/19 10:10	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 10:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 10:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 10:10	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 10:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 10:10	1
Carbon disulfide	**0.65**	**J**	1.0	0.50	ug/L			10/23/19 10:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 10:10	1
Chlorobenzene	**0.57**	**J**	1.0	0.50	ug/L			10/23/19 10:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 10:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 10:10	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 10:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 10:10	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 10:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 10:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 10:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 10:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 10:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 10:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 10:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 10:10	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 10:10	1
Isopropylbenzene	**17**		1.0	0.53	ug/L			10/23/19 10:10	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 10:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 10:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 10:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 10:10	1
Naphthalene	**160**		1.0	1.0	ug/L			10/23/19 10:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 10:10	1
N-Propylbenzene	**25**		1.0	0.69	ug/L			10/23/19 10:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 10:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 10:10	1
p-Isopropyltoluene	**1.1**		1.0	0.71	ug/L			10/23/19 10:10	1
sec-Butylbenzene	**1.9**		1.0	0.70	ug/L			10/23/19 10:10	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 10:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 10:10	1

Client Sample ID: ROST4PZE-ROX-101519
Date Collected: 10/15/19 10:40
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 10:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 10:10	1
Toluene	**58**		1.0	0.41	ug/L			10/23/19 10:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 10:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 10:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 10:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 10:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 10:10	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 10:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 10:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 10:10	1
1,3,5-Trimethylbenzene	**39**		1.0	0.56	ug/L			10/23/19 10:10	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 10:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 10:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 10:10*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*10/23/19 10:10*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 10:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**520**		5.0	2.5	ug/L			10/23/19 11:38	5
m-Xylene & p-Xylene	**640**		25	8.0	ug/L			10/23/19 11:38	5
o-Xylene	**130**		25	3.0	ug/L			10/23/19 11:38	5
1,2,4-Trimethylbenzene	**220**		5.0	4.1	ug/L			10/23/19 11:38	5
Xylenes, Total	**770**		50	8.0	ug/L			10/23/19 11:38	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*78 - 118*		*10/23/19 11:38*	*5*
Dibromofluoromethane	*102*		*81 - 121*		*10/23/19 11:38*	*5*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/23/19 11:38*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**2.0**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:06	1
Acenaphthylene	ND		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:06	1
Anthracene	**1.1**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:06	1
Benzo[a]anthracene	**0.041**	**J**	0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Benzo[a]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Benzo[b]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Benzo[g,h,i]perylene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Chrysene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Dibenz(a,h)anthracene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1
Fluoranthene	**0.12**	**J B**	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:06	1
Fluorene	**1.6**		0.19	0.020	ug/L		10/21/19 11:00	10/23/19 11:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.038	ug/L		10/21/19 11:00	10/23/19 11:06	1

Client Sample ID: ROST4PZE-ROX-101519
Date Collected: 10/15/19 10:40
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-4
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	**5.7**		0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:06	1
Pyrene	**0.36**	**B**	0.19	0.019	ug/L		10/21/19 11:00	10/23/19 11:06	1
1-Methylnaphthalene	**53**		0.95	0.095	ug/L		10/21/19 11:00	10/23/19 11:23	5
2-Methylnaphthalene	**59**		0.95	0.095	ug/L		10/21/19 11:00	10/23/19 11:23	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*69*		*33 - 138*	*10/21/19 11:00*	*10/23/19 11:06*	*1*
2-Fluorobiphenyl	*70*		*15 - 122*	*10/21/19 11:00*	*10/23/19 11:06*	*1*
Nitrobenzene-d5	*76*		*19 - 130*	*10/21/19 11:00*	*10/23/19 11:23*	*5*

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		10/21/19 11:00	10/23/19 23:07	1
Benzenethiol	ND	* UJ	9.5	1.6	ug/L		10/21/19 11:00	10/23/19 23:07	1
Benzoic acid	ND	UJ	28	6.9	ug/L		10/21/19 11:00	10/23/19 23:07	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:07	1
Bis(2-chloroethoxy)methane	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:07	1
Bis(2-chloroethyl)ether	ND		9.5	0.70	ug/L		10/21/19 11:00	10/23/19 23:07	1
bis (2-chloroisopropyl) ether	ND		9.5	0.77	ug/L		10/21/19 11:00	10/23/19 23:07	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		10/21/19 11:00	10/23/19 23:07	1
4-Bromophenyl phenyl ether	ND		9.5	0.30	ug/L		10/21/19 11:00	10/23/19 23:07	1
Butyl benzyl phthalate	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:07	1
4-Chloroaniline	ND		9.5	3.2	ug/L		10/21/19 11:00	10/23/19 23:07	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		10/21/19 11:00	10/23/19 23:07	1
2-Chloronaphthalene	ND		9.5	0.49	ug/L		10/21/19 11:00	10/23/19 23:07	1
2-Chlorophenol	ND	*	9.5	2.1	ug/L		10/21/19 11:00	10/23/19 23:07	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:07	1
Dibenz[a,h]acridine	ND		9.5	2.8	ug/L		10/21/19 11:00	10/23/19 23:07	1
Dibenzofuran	**1.8**	**J**	9.5	0.49	ug/L		10/21/19 11:00	10/23/19 23:07	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		10/21/19 11:00	10/23/19 23:07	1
Diethyl phthalate	ND		9.5	0.66	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:07	1
Dimethyl phthalate	ND		9.5	0.57	ug/L		10/21/19 11:00	10/23/19 23:07	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		10/21/19 11:00	10/23/19 23:07	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.9	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		10/21/19 11:00	10/23/19 23:07	1
Di-n-octyl phthalate	ND		9.5	0.42	ug/L		10/21/19 11:00	10/23/19 23:07	1
1,4-Dioxane	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:07	1
Hexachlorobenzene	ND		9.5	0.24	ug/L		10/21/19 11:00	10/23/19 23:07	1
Hexachlorocyclopentadiene	ND	*	19	2.5	ug/L		10/21/19 11:00	10/23/19 23:07	1
Hexachloroethane	ND		9.5	4.0	ug/L		10/21/19 11:00	10/23/19 23:07	1
Indene	**5.9**	**J** J	9.5	0.95	ug/L		10/21/19 11:00	10/23/19 23:07	1
Isophorone	ND		9.5	0.54	ug/L		10/21/19 11:00	10/23/19 23:07	1
2-Methylphenol	ND		9.5	1.7	ug/L		10/21/19 11:00	10/23/19 23:07	1
3 & 4 Methylphenol	ND	*	19	0.99	ug/L		10/21/19 11:00	10/23/19 23:07	1

Client Sample ID: ROST4PZE-ROX-101519
Date Collected: 10/15/19 10:40
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.5	2.1	ug/L		10/21/19 11:00	10/23/19 23:07	1
3-Nitroaniline	ND		9.5	1.7	ug/L		10/21/19 11:00	10/23/19 23:07	1
4-Nitroaniline	ND		9.5	2.4	ug/L		10/21/19 11:00	10/23/19 23:07	1
Nitrobenzene	ND		9.5	0.52	ug/L		10/21/19 11:00	10/23/19 23:07	1
2-Nitrophenol	ND		9.5	0.62	ug/L		10/21/19 11:00	10/23/19 23:07	1
4-Nitrophenol	ND		9.5	2.0	ug/L		10/21/19 11:00	10/23/19 23:07	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:07	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		10/21/19 11:00	10/23/19 23:07	1
N-Nitrosodiphenylamine	ND		9.5	0.45	ug/L		10/21/19 11:00	10/23/19 23:07	1
Pentachlorophenol	ND		19	1.7	ug/L		10/21/19 11:00	10/23/19 23:07	1
Phenol	**4.2**	**J ***	9.5	2.5	ug/L		10/21/19 11:00	10/23/19 23:07	1
Pyridine	ND		9.5	3.0	ug/L		10/21/19 11:00	10/23/19 23:07	1
Quinoline	ND		9.5	5.7	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		10/21/19 11:00	10/23/19 23:07	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/21/19 11:00	10/23/19 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*34 - 120*	*10/21/19 11:00*	*10/23/19 23:07*	*1*
2-Fluorophenol	*22*		*10 - 120*	*10/21/19 11:00*	*10/23/19 23:07*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*10/21/19 11:00*	*10/23/19 23:07*	*1*
Phenol-d5	*52*		*10 - 120*	*10/21/19 11:00*	*10/23/19 23:07*	*1*
Terphenyl-d14	*84*		*53 - 125*	*10/21/19 11:00*	*10/23/19 23:07*	*1*
2,4,6-Tribromophenol	*97*		*15 - 135*	*10/21/19 11:00*	*10/23/19 23:07*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.027	0.0049	ug/L		10/22/19 12:21	10/23/19 01:34	1
1,2-Dibromoethane	ND		0.018	0.0045	ug/L		10/22/19 12:21	10/23/19 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*	*p*	*51 - 149*	*10/22/19 12:21*	*10/23/19 01:34*	*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
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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)
400-178067-4	ROST4PZE-ROX-101519	106	99	98
400-178067-4 - DL	ROST4PZE-ROX-101519	105	102	100
LCS 400-462744/1002	Lab Control Sample	105	110	97
MB 400-462744/4	Method Blank	106	103	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-178067-4	ROST4PZE-ROX-101519	80	22	74	52	84	97
LCS 400-462401/2-A	Lab Control Sample	61	16	69	38	68	57
LCS 400-462401/4-A	Lab Control Sample	81	22	71	41	77	64
LCSD 400-462401/3-A	Lab Control Sample Dup	76	44	79	62	77	70
LCSD 400-462401/5-A	Lab Control Sample Dup	83	15	70	34	85	72
MB 400-462401/1-A	Method Blank	72	33	69	56	80	60

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-178067-4	ROST4PZE-ROX-101519	69	70	
400-178067-4	ROST4PZE-ROX-101519			76
LCS 400-462401/2-A	Lab Control Sample	80	77	60
LCSD 400-462401/3-A	Lab Control Sample Dup	75	82	57
MB 400-462401/1-A	Method Blank	71	69	79

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-2

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)
400-178067-4	ROST4PZE-ROX-101519	115 p
LCS 400-462638/2-A	Lab Control Sample	86
LCSD 400-462638/3-A	Lab Control Sample Dup	84
MB 400-462638/1-A	Method Blank	86

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-178067-2

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: ROST4PZE-ROX-101519

Date Collected: 10/15/19 10:40
Date Received: 10/16/19 09:22

Lab Sample ID: 400-178067-4
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	462744	10/23/19 10:10	RS	TAL PEN
Total/NA	Analysis	8260B	DL	5	5 mL	5 mL	462744	10/23/19 11:38	RS	TAL PEN
Total/NA	Prep	3520C			1053.2 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 23:07	VC1	TAL PEN
Total/NA	Prep	3520C			1053.2 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 11:06	KJA	TAL PEN
Total/NA	Prep	3520C			1053.2 mL	1 mL	462401	10/21/19 11:00	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 11:23	KJA	TAL PEN
Total/NA	Prep	8011			39.2 mL	35 mL	462638	10/22/19 12:21	KLR	TAL PEN
Total/NA	Analysis	8011		1			462672	10/23/19 01:34	KLR	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462401/1-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 21:01	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		1			462759	10/23/19 09:56	KJA	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462638/1-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	462638	10/22/19 12:21	KLR	TAL PEN
Total/NA	Analysis	8011		1			462672	10/22/19 16:58	KLR	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-462744/4
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	462744	10/23/19 08:12	RS	TAL PEN

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-462401/2-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:27	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:14	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-462401/4-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-462638/2-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	462638	10/22/19 12:21	KLR	TAL PEN
Total/NA	Analysis	8011		1			462672	10/22/19 17:22	KLR	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-462744/1002**
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	462744	10/23/19 07:16	RS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-462401/3-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	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	462867	10/23/19 21:52	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D LL		5			462759	10/23/19 10:31	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-462401/5-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	462401	10/21/19 10:59	HAD	TAL PEN
Total/NA	Analysis	8270D		1			462867	10/23/19 22:42	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-462638/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	462638	10/22/19 12:21	KLR	TAL PEN
Total/NA	Analysis	8011		1			462672	10/22/19 17:46	KLR	TAL PEN

Laboratory References:
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 462744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	8260B	
400-178067-4 - DL	ROST4PZE-ROX-101519	Total/NA	Water	8260B	
MB 400-462744/4	Method Blank	Total/NA	Water	8260B	
LCS 400-462744/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 462401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	3520C	
MB 400-462401/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 462759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	8270D LL	462401
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	8270D LL	462401
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D LL	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D LL	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	462401

Analysis Batch: 462867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	8270D	462401
MB 400-462401/1-A	Method Blank	Total/NA	Water	8270D	462401
LCS 400-462401/2-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCS 400-462401/4-A	Lab Control Sample	Total/NA	Water	8270D	462401
LCSD 400-462401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401
LCSD 400-462401/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	462401

GC Semi VOA

Prep Batch: 462638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	8011	
MB 400-462638/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-462638/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-462638/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 462672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-178067-4	ROST4PZE-ROX-101519	Total/NA	Water	8011	462638
MB 400-462638/1-A	Method Blank	Total/NA	Water	8011	462638
LCS 400-462638/2-A	Lab Control Sample	Total/NA	Water	8011	462638
LCSD 400-462638/3-A	Lab Control Sample Dup	Total/NA	Water	8011	462638

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			10/23/19 08:12	1
Acrolein	ND		20	10	ug/L			10/23/19 08:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/23/19 08:12	1
Benzene	ND		1.0	0.38	ug/L			10/23/19 08:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Bromoform	ND		5.0	0.71	ug/L			10/23/19 08:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/23/19 08:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/23/19 08:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/23/19 08:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/23/19 08:12	1
Chloroform	ND		1.0	0.60	ug/L			10/23/19 08:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Chloromethane	ND		1.0	0.83	ug/L			10/23/19 08:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/23/19 08:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/23/19 08:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/23/19 08:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/23/19 08:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/23/19 08:12	1
2-Hexanone	ND		25	3.1	ug/L			10/23/19 08:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/23/19 08:12	1
Methylene bromide	ND		5.0	0.59	ug/L			10/23/19 08:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/23/19 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/23/19 08:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			10/23/19 08:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			10/23/19 08:12	1
Naphthalene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/23/19 08:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/23/19 08:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/23/19 08:12	1
o-Xylene	ND		5.0	0.60	ug/L			10/23/19 08:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/23/19 08:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-462744/4
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/23/19 08:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
Styrene	ND		1.0	1.0	ug/L			10/23/19 08:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/23/19 08:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			10/23/19 08:12	1
Toluene	ND		1.0	0.41	ug/L			10/23/19 08:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/23/19 08:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			10/23/19 08:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			10/23/19 08:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			10/23/19 08:12	1
Trichloroethene	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			10/23/19 08:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/23/19 08:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/23/19 08:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/23/19 08:12	1
Vinyl acetate	ND		25	2.0	ug/L			10/23/19 08:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/23/19 08:12	1
Xylenes, Total	ND		10	1.6	ug/L			10/23/19 08:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*78 - 118*		*10/23/19 08:12*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*10/23/19 08:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/19 08:12*	*1*

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	193		ug/L		96	43 - 160
Acrolein	500	550		ug/L		110	38 - 160
Acrylonitrile	500	482		ug/L		96	64 - 142
Benzene	50.0	44.5		ug/L		89	70 - 130
Bromobenzene	50.0	44.3		ug/L		89	70 - 132
Bromochloromethane	50.0	43.9		ug/L		88	70 - 130
Bromodichloromethane	50.0	46.6		ug/L		93	67 - 133
Bromoform	50.0	51.8		ug/L		104	57 - 140
Bromomethane	50.0	51.6		ug/L		103	10 - 160
2-Butanone (MEK)	200	186		ug/L		93	61 - 145
Carbon disulfide	50.0	38.9		ug/L		78	61 - 137
Carbon tetrachloride	50.0	45.8		ug/L		92	61 - 137
Chlorobenzene	50.0	43.2		ug/L		86	70 - 130
Dibromochloromethane	50.0	38.5		ug/L		77	67 - 135
Chloroethane	50.0	50.0		ug/L		100	55 - 141

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

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	45.3		ug/L		91	10 - 160
Chloroform	50.0	45.6		ug/L		91	69 - 130
1-Chlorohexane	50.0	44.3		ug/L		89	69 - 130
Chloromethane	50.0	38.5		ug/L		77	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	41.8		ug/L		84	69 - 132
1,2-Dichlorobenzene	50.0	42.1		ug/L		84	67 - 130
1,3-Dichlorobenzene	50.0	42.5		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
Dichlorodifluoromethane	50.0	30.3		ug/L		61	41 - 146
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	43.6		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	44.6		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	47.1		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	42.3		ug/L		85	70 - 130
2,2-Dichloropropane	50.0	45.0		ug/L		90	52 - 135
1,1-Dichloropropene	50.0	45.7		ug/L		91	70 - 130
Ethylbenzene	50.0	42.9		ug/L		86	70 - 130
Ethyl methacrylate	50.0	41.5		ug/L		83	68 - 130
Hexachlorobutadiene	50.0	45.6		ug/L		91	53 - 140
2-Hexanone	200	193		ug/L		97	65 - 137
Isopropylbenzene	50.0	38.8		ug/L		78	70 - 130
Methylene bromide	50.0	45.4		ug/L		91	70 - 130
Methylene Chloride	50.0	41.6		ug/L		83	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	40.6		ug/L		81	66 - 130
m-Xylene & p-Xylene	50.0	43.0		ug/L		86	70 - 130
Naphthalene	50.0	29.8		ug/L		60	47 - 149
n-Butylbenzene	50.0	39.2		ug/L		78	67 - 130
N-Propylbenzene	50.0	41.9		ug/L		84	70 - 130
o-Chlorotoluene	50.0	45.5		ug/L		91	70 - 130
o-Xylene	50.0	41.8		ug/L		84	70 - 130
p-Chlorotoluene	50.0	41.8		ug/L		84	70 - 130
p-Isopropyltoluene	50.0	39.6		ug/L		79	65 - 130
sec-Butylbenzene	50.0	40.9		ug/L		82	66 - 130
Styrene	50.0	42.2		ug/L		84	70 - 130
tert-Butylbenzene	50.0	40.2		ug/L		80	64 - 139
1,1,1,2-Tetrachloroethane	50.0	37.6		ug/L		75	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 131
Tetrachloroethene	50.0	39.7		ug/L		79	65 - 130
Toluene	50.0	43.4		ug/L		87	70 - 130
trans-1,2-Dichloroethene	50.0	45.2		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	39.6		ug/L		79	63 - 130
1,2,3-Trichlorobenzene	50.0	34.8		ug/L		70	60 - 138
1,2,4-Trichlorobenzene	50.0	37.8		ug/L		76	60 - 140
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	70 - 130
Trichloroethene	50.0	42.2		ug/L		84	70 - 130
Trichlorofluoromethane	50.0	51.3		ug/L		103	65 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462744/1002
Matrix: Water
Analysis Batch: 462744

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.2		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	41.5		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	50.0	40.3		ug/L		81	69 - 130
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	46.2		ug/L		92	59 - 136
Xylenes, Total	100	84.8		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*78 - 118*
Dibromofluoromethane	*110*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzenethiol	ND		10	1.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzoic acid	ND		30	7.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
Benzyl alcohol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		10/21/19 10:59	10/23/19 21:01	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		10/21/19 10:59	10/23/19 21:01	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		10/21/19 10:59	10/23/19 21:01	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloroaniline	ND		10	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chloronaphthalene	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Chlorophenol	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dibenzofuran	ND		10	0.52	ug/L		10/21/19 10:59	10/23/19 21:01	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Diethyl phthalate	ND		10	0.70	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Dimethyl phthalate	ND		10	0.60	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		10/21/19 10:59	10/23/19 21:01	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		10/21/19 10:59	10/23/19 21:01	1
1,4-Dioxane	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorobenzene	ND		10	0.25	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Hexachloroethane	ND		10	4.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Indene	ND		10	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
Isophorone	ND		10	0.57	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Methylphenol	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitroaniline	ND		10	2.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
3-Nitroaniline	ND		10	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitroaniline	ND		10	2.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
Nitrobenzene	ND		10	0.55	ug/L		10/21/19 10:59	10/23/19 21:01	1
2-Nitrophenol	ND		10	0.65	ug/L		10/21/19 10:59	10/23/19 21:01	1
4-Nitrophenol	ND		10	2.1	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		10/21/19 10:59	10/23/19 21:01	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pentachlorophenol	ND		20	1.8	ug/L		10/21/19 10:59	10/23/19 21:01	1
Phenol	ND		10	2.6	ug/L		10/21/19 10:59	10/23/19 21:01	1
Pyridine	ND		10	3.2	ug/L		10/21/19 10:59	10/23/19 21:01	1
Quinoline	ND		10	6.0	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		10/21/19 10:59	10/23/19 21:01	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/21/19 10:59	10/23/19 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2-Fluorophenol	*33*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Phenol-d5	*56*		*10 - 120*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
Terphenyl-d14	*80*		*53 - 125*	*10/21/19 10:59*	*10/23/19 21:01*	*1*
2,4,6-Tribromophenol	*60*		*15 - 135*	*10/21/19 10:59*	*10/23/19 21:01*	*1*

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	10.7		ug/L		36	29 - 120
Benzoic acid	117	69.5		ug/L		60	10 - 150
Benzyl alcohol	30.0	9.76	J	ug/L		33	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.0		ug/L		70	45 - 120
Bis(2-chloroethyl)ether	30.0	32.3		ug/L		108	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.6		ug/L		69	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	19.2		ug/L		64	48 - 150
4-Bromophenyl phenyl ether	30.0	17.3		ug/L		58	55 - 122
Butyl benzyl phthalate	30.0	19.4		ug/L		65	46 - 145
4-Chloroaniline	30.0	19.1		ug/L		64	30 - 120
4-Chloro-3-methylphenol	30.0	20.8		ug/L		69	39 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	17.7		ug/L		59	52 - 120
2-Chlorophenol	30.0	11.8		ug/L		39	34 - 120
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124
Dibenz[a,h]acridine	30.0	17.2		ug/L		57	46 - 149
Dibenzofuran	30.0	19.3		ug/L		64	58 - 123
3,3'-Dichlorobenzidine	40.0	30.7		ug/L		77	39 - 135
2,4-Dichlorophenol	30.0	16.9		ug/L		56	39 - 128
Diethyl phthalate	30.0	22.6		ug/L		75	44 - 146
2,4-Dimethylphenol	30.0	20.0		ug/L		67	44 - 120
Dimethyl phthalate	30.0	20.7		ug/L		69	50 - 131
Di-n-butyl phthalate	30.0	19.5		ug/L		65	55 - 131
4,6-Dinitro-ortho-cresol	60.0	42.7		ug/L		71	10 - 150
2,4-Dinitrophenol	60.0	48.4		ug/L		81	10 - 150
2,4-Dinitrotoluene	30.0	22.9		ug/L		76	58 - 140
2,6-Dinitrotoluene	30.0	21.0		ug/L		70	57 - 130
Di-n-octyl phthalate	30.0	19.6		ug/L		65	50 - 150
1,4-Dioxane	30.0	12.3		ug/L		41	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	19.7		ug/L		66	47 - 123
Hexachlorobenzene	30.0	17.9		ug/L		60	52 - 131
Hexachlorocyclopentadiene	30.0	8.44	J	ug/L		28	10 - 129
Hexachloroethane	30.0	15.7		ug/L		52	41 - 120
Indene	30.0	18.3		ug/L		61	47 - 120
Isophorone	30.0	20.8		ug/L		69	49 - 120
2-Methylphenol	30.0	21.4		ug/L		71	39 - 123
3 & 4 Methylphenol	30.0	17.3	J	ug/L		58	38 - 121
2-Nitroaniline	30.0	22.4		ug/L		75	47 - 150
3-Nitroaniline	30.0	20.0		ug/L		67	34 - 132
4-Nitroaniline	30.0	23.5		ug/L		78	41 - 135
Nitrobenzene	30.0	20.8		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136
4-Nitrophenol	60.0	41.4		ug/L		69	10 - 150
N-Nitrosodimethylamine	30.0	22.1		ug/L		74	22 - 148
N-Nitrosodi-n-propylamine	30.0	23.5		ug/L		78	44 - 120
N-Nitrosodiphenylamine	29.8	19.3		ug/L		65	56 - 120
Pentachlorophenol	60.0	34.6		ug/L		58	15 - 141
Phenol	30.0	11.5		ug/L		38	33 - 120
Pyridine	60.0	34.3		ug/L		57	26 - 120
Quinoline	30.0	19.9		ug/L		66	51 - 129
2,4,5-Trichlorophenol	30.0	19.0		ug/L		63	38 - 147
2,4,6-Trichlorophenol	30.0	16.9		ug/L		56	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*16*		*10 - 120*
Nitrobenzene-d5	*69*		*27 - 120*
Phenol-d5	*38*		*10 - 120*
Terphenyl-d14	*68*		*53 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	57		15 - 135

Lab Sample ID: LCS 400-462401/4-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

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	81		34 - 120
2-Fluorophenol	22		10 - 120
Nitrobenzene-d5	71		27 - 120
Phenol-d5	41		10 - 120
Terphenyl-d14	77		53 - 125
2,4,6-Tribromophenol	64		15 - 135

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	14.4		ug/L		48	29 - 120	29	30
Benzoic acid	117	89.2		ug/L		77	10 - 150	25	30
Benzyl alcohol	30.0	10.9		ug/L		36	19 - 125	11	30
Bis(2-chloroethoxy)methane	30.0	23.1		ug/L		77	45 - 120	10	30
Bis(2-chloroethyl)ether	30.0	33.8		ug/L		113	48 - 120	5	30
bis (2-chloroisopropyl) ether	30.0	23.5		ug/L		78	30 - 125	13	30
Bis(2-ethylhexyl) phthalate	30.0	22.3		ug/L		74	48 - 150	15	30
4-Bromophenyl phenyl ether	30.0	20.3		ug/L		68	55 - 122	16	30
Butyl benzyl phthalate	30.0	22.4		ug/L		75	46 - 145	14	30
4-Chloroaniline	30.0	16.0		ug/L		53	30 - 120	18	30
4-Chloro-3-methylphenol	30.0	24.0		ug/L		80	39 - 140	14	30
2-Chloronaphthalene	30.0	22.1		ug/L		74	52 - 120	22	30
2-Chlorophenol	30.0	20.3	*	ug/L		68	34 - 120	53	30
4-Chlorophenyl phenyl ether	30.0	21.3		ug/L		71	58 - 124	17	30
Dibenz[a,h]acridine	30.0	21.3		ug/L		71	46 - 149	21	30
Dibenzofuran	30.0	22.9		ug/L		76	58 - 123	17	30
3,3'-Dichlorobenzidine	40.0	35.4		ug/L		88	39 - 135	14	30
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128	30	30
Diethyl phthalate	30.0	25.9		ug/L		86	44 - 146	14	30
2,4-Dimethylphenol	30.0	23.7		ug/L		79	44 - 120	17	30
Dimethyl phthalate	30.0	23.7		ug/L		79	50 - 131	13	30
Di-n-butyl phthalate	30.0	22.7		ug/L		76	55 - 131	15	30
4,6-Dinitro-ortho-cresol	60.0	50.9		ug/L		85	10 - 150	18	30
2,4-Dinitrophenol	60.0	55.5		ug/L		92	10 - 150	14	30
2,4-Dinitrotoluene	30.0	25.8		ug/L		86	58 - 140	12	30
2,6-Dinitrotoluene	30.0	24.3		ug/L		81	57 - 130	15	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	23.4		ug/L		78	50 - 150	18	30
1,4-Dioxane	30.0	14.7		ug/L		49	25 - 120	18	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.2		ug/L		77	47 - 123	16	30
Hexachlorobenzene	30.0	21.1		ug/L		70	52 - 131	16	30
Hexachlorocyclopentadiene	30.0	11.7	J *	ug/L		39	10 - 129	33	30
Hexachloroethane	30.0	20.1		ug/L		67	41 - 120	25	30
Indene	30.0	23.1		ug/L		77	47 - 120	23	30
Isophorone	30.0	23.0		ug/L		77	49 - 120	10	30
2-Methylphenol	30.0	28.7		ug/L		96	39 - 123	29	30
3 & 4 Methylphenol	30.0	23.7	*	ug/L		79	38 - 121	32	30
2-Nitroaniline	30.0	25.8		ug/L		86	47 - 150	14	30
3-Nitroaniline	30.0	22.4		ug/L		75	34 - 132	11	30
4-Nitroaniline	30.0	26.5		ug/L		88	41 - 135	12	30
Nitrobenzene	30.0	23.2		ug/L		77	47 - 120	11	30
2-Nitrophenol	30.0	23.9		ug/L		80	28 - 136	27	30
4-Nitrophenol	60.0	45.5		ug/L		76	10 - 150	9	30
N-Nitrosodimethylamine	30.0	25.4		ug/L		85	22 - 148	14	30
N-Nitrosodi-n-propylamine	30.0	26.7		ug/L		89	44 - 120	13	30
N-Nitrosodiphenylamine	29.8	22.3		ug/L		75	56 - 120	15	30
Pentachlorophenol	60.0	41.8		ug/L		70	15 - 141	19	30
Phenol	30.0	22.2	*	ug/L		74	33 - 120	64	30
Pyridine	60.0	41.0		ug/L		68	26 - 120	18	30
Quinoline	30.0	22.8		ug/L		76	51 - 129	13	30
2,4,5-Trichlorophenol	30.0	22.8		ug/L		76	38 - 147	18	30
2,4,6-Trichlorophenol	30.0	22.4		ug/L		75	36 - 139	28	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*79*		*27 - 120*
Phenol-d5	*62*		*10 - 120*
Terphenyl-d14	*77*		*53 - 125*
2,4,6-Tribromophenol	*70*		*15 - 135*

Lab Sample ID: LCSD 400-462401/5-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	90	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*15*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*34*		*10 - 120*
Terphenyl-d14	*85*		*53 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-462401/5-A
Matrix: Water
Analysis Batch: 462867

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	72		15 - 135

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-462401/1-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Acenaphthylene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Anthracene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[a]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[b]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[g,h,i]perylene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Chrysene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Dibenz(a,h)anthracene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluoranthene	0.0233	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Fluorene	ND		0.20	0.021	ug/L		10/21/19 10:59	10/23/19 09:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.040	ug/L		10/21/19 10:59	10/23/19 09:56	1
Phenanthrene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
Pyrene	0.0235	J	0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
1-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1
2-Methylnaphthalene	ND		0.20	0.020	ug/L		10/21/19 10:59	10/23/19 09:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	71		33 - 138	10/21/19 10:59	10/23/19 09:56	1
2-Fluorobiphenyl	69		15 - 122	10/21/19 10:59	10/23/19 09:56	1
Nitrobenzene-d5	79		19 - 130	10/21/19 10:59	10/23/19 09:56	1

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.6		ug/L		85	41 - 120
Acenaphthylene	30.0	27.9		ug/L		93	44 - 120
Anthracene	30.0	24.4		ug/L		81	49 - 120
Benzo[a]anthracene	30.0	23.8		ug/L		79	61 - 135
Benzo[a]pyrene	30.0	25.6		ug/L		85	52 - 120
Benzo[b]fluoranthene	30.0	26.7		ug/L		89	53 - 134
Benzo[g,h,i]perylene	30.0	20.3		ug/L		68	47 - 133
Benzo[k]fluoranthene	30.0	27.0		ug/L		90	57 - 134
Chrysene	30.0	22.8		ug/L		76	55 - 122
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146
Fluoranthene	30.0	24.4		ug/L		81	54 - 128

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-462401/2-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	26.4		ug/L		88	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.1		ug/L		74	43 - 142
Phenanthrene	30.0	23.6		ug/L		79	48 - 120
Pyrene	30.0	24.9		ug/L		83	48 - 132
1-Methylnaphthalene	30.0	20.8		ug/L		69	41 - 120
2-Methylnaphthalene	30.0	20.3		ug/L		68	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*80*		*33 - 138*
2-Fluorobiphenyl	*77*		*15 - 122*
Nitrobenzene-d5	*60*		*19 - 130*

Lab Sample ID: LCSD 400-462401/3-A
Matrix: Water
Analysis Batch: 462759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.2		ug/L		91	41 - 120	6	56
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120	5	56
Anthracene	30.0	25.5		ug/L		85	49 - 120	5	51
Benzo[a]anthracene	30.0	23.1		ug/L		77	61 - 135	3	49
Benzo[a]pyrene	30.0	25.4		ug/L		85	52 - 120	1	50
Benzo[b]fluoranthene	30.0	26.0		ug/L		87	53 - 134	3	54
Benzo[g,h,i]perylene	30.0	20.5		ug/L		68	47 - 133	1	50
Benzo[k]fluoranthene	30.0	27.3		ug/L		91	57 - 134	1	52
Chrysene	30.0	22.4		ug/L		75	55 - 122	2	50
Dibenz(a,h)anthracene	30.0	22.8		ug/L		76	48 - 146	0	50
Fluoranthene	30.0	24.8		ug/L		83	54 - 128	2	52
Fluorene	30.0	26.8		ug/L		89	45 - 125	2	56
Indeno[1,2,3-cd]pyrene	30.0	22.3		ug/L		74	43 - 142	1	51
Phenanthrene	30.0	24.0		ug/L		80	48 - 120	1	56
Pyrene	30.0	24.1		ug/L		80	48 - 132	3	52
1-Methylnaphthalene	30.0	23.2		ug/L		77	41 - 120	11	55
2-Methylnaphthalene	30.0	22.5		ug/L		75	32 - 124	10	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*75*		*33 - 138*
2-Fluorobiphenyl	*82*		*15 - 122*
Nitrobenzene-d5	*57*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-462638/1-A
Matrix: Water
Analysis Batch: 462672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462638

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		10/22/19 12:21	10/22/19 16:58	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-462638/1-A
Matrix: Water
Analysis Batch: 462672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		10/22/19 12:21	10/22/19 16:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*10/22/19 12:21*	*10/22/19 16:58*	*1*

Lab Sample ID: LCS 400-462638/2-A
Matrix: Water
Analysis Batch: 462672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.100	0.100		ug/L		100	60 - 140
1,2-Dibromoethane	0.100	0.102		ug/L		102	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*86*		*51 - 149*

Lab Sample ID: LCSD 400-462638/3-A
Matrix: Water
Analysis Batch: 462672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 462638

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.100	0.101		ug/L		101	60 - 140	1	30
1,2-Dibromoethane	0.100	0.104		ug/L		104	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*84*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (Lab Vendor # 1361589 (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 - 1.03.004 | 60592794 - 1.03.0044

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF DATE

PAGE 400-178087 COC

SAMPLING COMPANY: AECOM

LOGCODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60592794 - 1.03.004 | 60592794 - 1.03.0044

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

CC: 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 B. Burleson

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ 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 - 1.03.004: VOC 8260	SVOC 8270	UNIT COST 60592794 - 1.03.0044: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-101519-8011	10/15/19	0000	Water	X					2			2		
	TB-ROX-101519-8260		0000		X					2	2				
	MW5-ROX-101519		0925		X			X		6	2	1	2	1	
	ROST4PZE-ROX-101519		1040		X			X		6	2	1	2	1	
	MW22-ROX-101519		1135		X			X		6	2	1	2	1	
	MW22-ROX-101519-DUP		1135		X			X		6	2	1	2	1	
	P59-ROX-101519		1320		X			X		6	2	1	2	1	SPLIT SAMPLE
	P57-ROX-101519		1415		X			X		6	2	1	2	1	
	P57-ROX-101519-DUP		1415		X			X		6	2	1	2	1	

Relinquished by (Signature): B. Howell

Received by (Signature) Fedex: 1194 6302 0097 1194 6302 0086 1194 6302 0053 1194 6302 0075 1194 6302 0064

Date: 10/15/19 Time: 1630

Relinquished by (Signature):

Received by (Signature):

Date: Time:

Relinquished by (Signature):

Received by (Signature): 0.2°C, 0.4°C, 1.4°C, 0.5°C, 2.6°C IR-8

Date: 10-16-19 Time: 0922

Custody seal #s: 1090699 / 1090698 1090695 / 1090694 1090693 / 1090692 1090697 / 1090696 1090701 / 1090700

Version: 14Dec15

Page 29 of 32

10/24/2019

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

PlaNet Site or Project ID: 25278

PO #: 60592794 - 1.03.004 | 60592794 - 1.03.0044

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10/15/19

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 - 1.03.004 | 60592794 - 1.03.0044

ADDRESS: 100 N. Broadway, 20th Floor, ST. LOUIS, MO 63102, USA

LDF 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

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 (Print): T. Jones M. D'Angelo

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 - 1.03.004: VOC 8260; SVOC 8270

UNIT COST 60592794 - 1.03.0044: 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	Container PID Readings or Laboratory Notes
	TB-ROX-101519-8011-SS	10/15/19	0000	Water	X					2			2		Split Sample
	TB-ROX-101519-8260-SS	10/15/19	0000		X					2	2				
	P56-ROX-101519	10/15/19	0945		4			2		6	X	X	X	X	
	T12-ROX-101519	10/15/19	1035		4			2		6	X	X	X	X	
	P93A-ROX-101519-EB	10/15/19	1210		4			2		6	X	X	X	X	
	P93A-ROX-101519	10/15/19	1255		4			2		6	X	X	X	X	
	P93D-ROX-101519	10/15/19	1325		4			2		6	X	X	X	X	
	P93B-ROX-101519	10/15/19	1415		4			2		6	X	X	X	X	
	P93B-ROX-101519-DUP	10/15/19	1415		4			2		6	X	X	X	X	

M D'Angelo 10/15/19

Relinquished by (Signature)	Received by (Signature)	Date	Time
M D'Angelo	Fedex: 1194 6302 0097; 1194 6302 0075; 1194 6302 0086; 1194 6302 0064; 1194 6302 0053	10/15/19	1600
Relinquished by (Signature)	Received by (Signature)	Date	Time
Relinquished by (Signature)	Received by (Signature)	10-16-19	0922

Custody Seal #: 1090699 / 1090698; 1090695 / 1090694; 1090693 / 1090692; 1090697 / 1090696; 1090701 / 1090700

Version: 14Dec15

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10/24/2019

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-178067-2

Login Number: 178067
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	0.2°C 0.4°C 1.4°C 0.5°C 2.6°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 400-178067-2
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	200041	10-09-19 *
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
USDA	Federal	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Appendix C

Charts – Benzene Concentrations Over Time – MW-7, MW-8, MW-22, MW-25, P-57, P-59, ROST-4-PZ(C), T-12

Table C1 - Historical Benzene Analytical Data for Select Groundwater Monitoring Wells

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-07	10/23/2009	684
	11/17/2010	876
	11/17/2010	928
	1/25/2011	1,150
	5/13/2011	1,030
	5/13/2011	922
	7/24/2011	1,840
	11/2/2011	774
	1/18/2012	1,330
	1/18/2012	1,110
	5/4/2012	738
	8/7/2012	591
	10/30/2012	863
	10/30/2012	833
	1/15/2013	1,320
	1/15/2013	1,230
	4/10/2013	499
	4/10/2013	475
	7/17/2013	1,000
	10/16/2013	553
	1/30/2014	1,490
	4/16/2014	1,390
	7/16/2014	1,270
	7/16/2014	1,370
	10/16/2014	1,130
	10/16/2014	984
	1/22/2015	799
	1/22/2015	821
	4/21/2015	1,110
	4/21/2015	1,160
	7/15/2015	1,370
	7/15/2015	1,300
	10/19/2015	1,000
	10/19/2015	990
	1/14/2016	740
	1/14/2016	700
	4/19/2016	1,100
	4/19/2016	1,100
	7/14/2016	670
	7/14/2016	680
	10/6/2016	910
	10/6/2016	840
	1/9/2017	950
	4/10/2017	1,000
	4/10/2017	1,100
	7/11/2017	870
	7/11/2017	810
	10/5/2017	1,400
	1/9/2018	1,500
	4/9/2018	770
	4/9/2018	780
	7/10/2018	1,900
	7/10/2018	1,700
	10/8/2018	650
	1/7/2019	650
	4/8/2019	1,000
	4/8/2019	1,000
	7/8/2019	1,300
	7/8/2019	1,400
	10/8/2019	1,700
	10/8/2019	1,600

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-08	10/22/2009	1,010
	10/22/2009	1,130
	11/17/2010	965
	1/25/2011	1,030
	1/25/2011	986
	5/13/2011	1,310
	5/13/2011	952
	7/24/2011	1,650
	7/24/2011	1,860
	11/2/2011	934
	1/18/2012	386
	5/4/2012	1,070
	5/4/2012	1,040
	8/7/2012	653
	8/7/2012	397
	10/30/2012	523
	1/15/2013	1,120
	4/10/2013	969
	7/17/2013	494
	7/17/2013	532
	10/16/2013	360
	10/16/2013	351
	1/30/2014	748
	1/30/2014	721
	4/16/2014	862
	4/16/2014	1,060
	7/16/2014	276
	10/16/2014	486
	1/22/2015	764
	4/21/2015	1,100
	7/15/2015	879
	10/19/2015	580
	1/14/2016	300
	4/19/2016	480
	7/14/2016	310
	10/6/2016	630
	1/9/2017	410
	4/10/2017	830
	7/10/2017	870
	10/5/2017	970
	10/5/2017	990
	1/9/2018	720
	4/9/2018	510
	7/10/2018	840
	10/8/2018	550
	10/8/2018	560
	1/7/2019	420
	1/7/2019	450
	4/8/2019	550
	7/8/2019	280
	10/8/2019	110

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-22	1/23/2013	2.12
	1/23/2013	2.09
	4/5/2013	1.5
	7/11/2013	1.11
	7/11/2013	1.19
	10/9/2013	1.33
	10/9/2013	1.39
	1/20/2014	1.47
	1/20/2014	1.58
	4/10/2014	1.56
	4/10/2014	1.7
	7/14/2014	1.74
	10/10/2014	1.62
	1/16/2015	1.51
	4/14/2015	1.62
	7/15/2015	2.92
	10/14/2015	0.8
	1/15/2016	1.1
	1/15/2016	1.2
	4/13/2016	1.2
	4/13/2016	1.2
	7/15/2016	0.062
	7/15/2016	0.061
	10/17/2016	0.31
	10/17/2016	0.31
	1/12/2017	0.036
	1/12/2017	0.039
	4/17/2017	0.14
	4/17/2017	0.13
	7/12/2017	0.0068
	7/12/2017	0.0079
	10/13/2017	0.0089
	10/13/2017	0.0086
	1/11/2018	0.32
	1/11/2018	0.32
	4/10/2018	0.43
	7/10/2018	0.79
	10/15/2018	0.056
	1/9/2019	0.1
	4/17/2019	0.22
	10/15/2019	0.0035
	10/15/2019	0.0039

SEE LAST PAGE OF TABLE FOR NOTES

TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-25	10/21/2014	501
	1/22/2015	62.8
	4/21/2015	78.7
	7/15/2015	71.9
	10/19/2015	11
	1/14/2016	2.2
	4/19/2016	0.99
	7/18/2016	1.2
	10/6/2016	0.37
	1/11/2017	0.28
	4/11/2017	0.19
	7/10/2017	0.056
	10/5/2017	0.065
	1/9/2018	0.028
	4/9/2018	0.02
	7/10/2018	0.005
	10/8/2018	0.0071
	1/7/2019	0.0023
	4/8/2019	0.017
	7/8/2019	0.016
	10/8/2019	0.044
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
	10/15/2019	2.3
	10/15/2019	2.3
	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
	10/15/2019	2.1

SEE LAST PAGE OF TABLE FOR NOTES

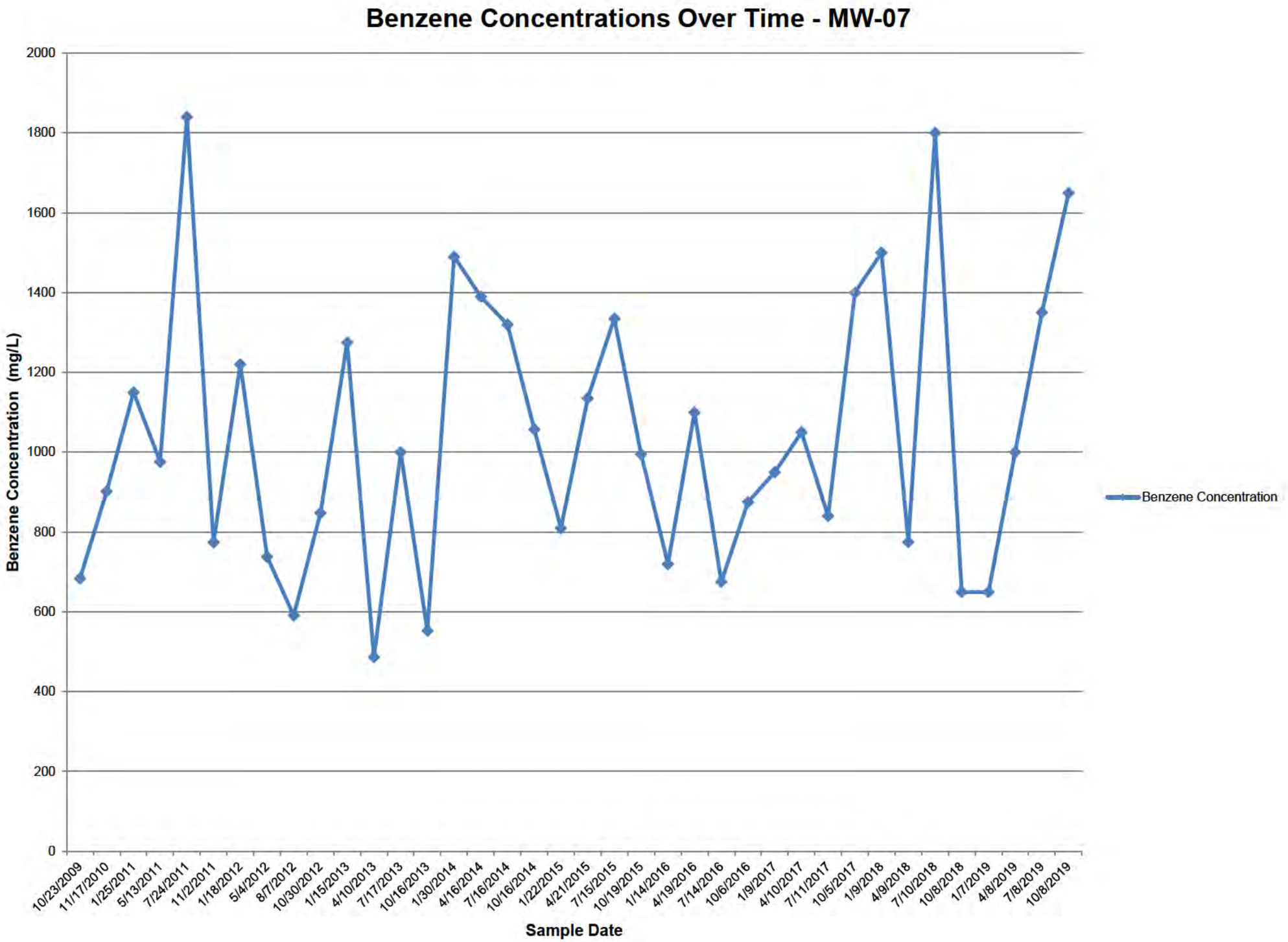
TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
ROST-4-PZ(C)	5/3/2011	0.211
	5/14/2012	ND (<0.0005)
	7/25/2012	0.0849
	10/29/2012	0.0033
	1/11/2013	ND (<0.0005)
	4/10/2013	0.0153
	7/11/2013	0.0497
	10/9/2013	0.00066
	1/17/2014	0.0015
	4/10/2014	0.0019
	7/10/2014	0.0751
	10/9/2014	0.039
	1/15/2015	0.0013
	4/13/2015	0.0694
	7/13/2015	0.0683
	10/12/2015	0.071
	1/15/2016	0.059
	4/13/2016	0.05
	7/15/2016	0.044
	10/13/2016	0.025
	1/12/2017	0.021
	4/17/2017	0.025
	7/12/2017	0.017
	10/12/2017	0.01
	1/15/2018	0.00054
	4/9/2018	ND (<0.001)
	7/9/2018	0.0018
	10/12/2018	0.0085
	1/9/2019	0.006
	4/16/2019	0.006
	7/12/2019	0.0077
	10/14/2019	0.0047

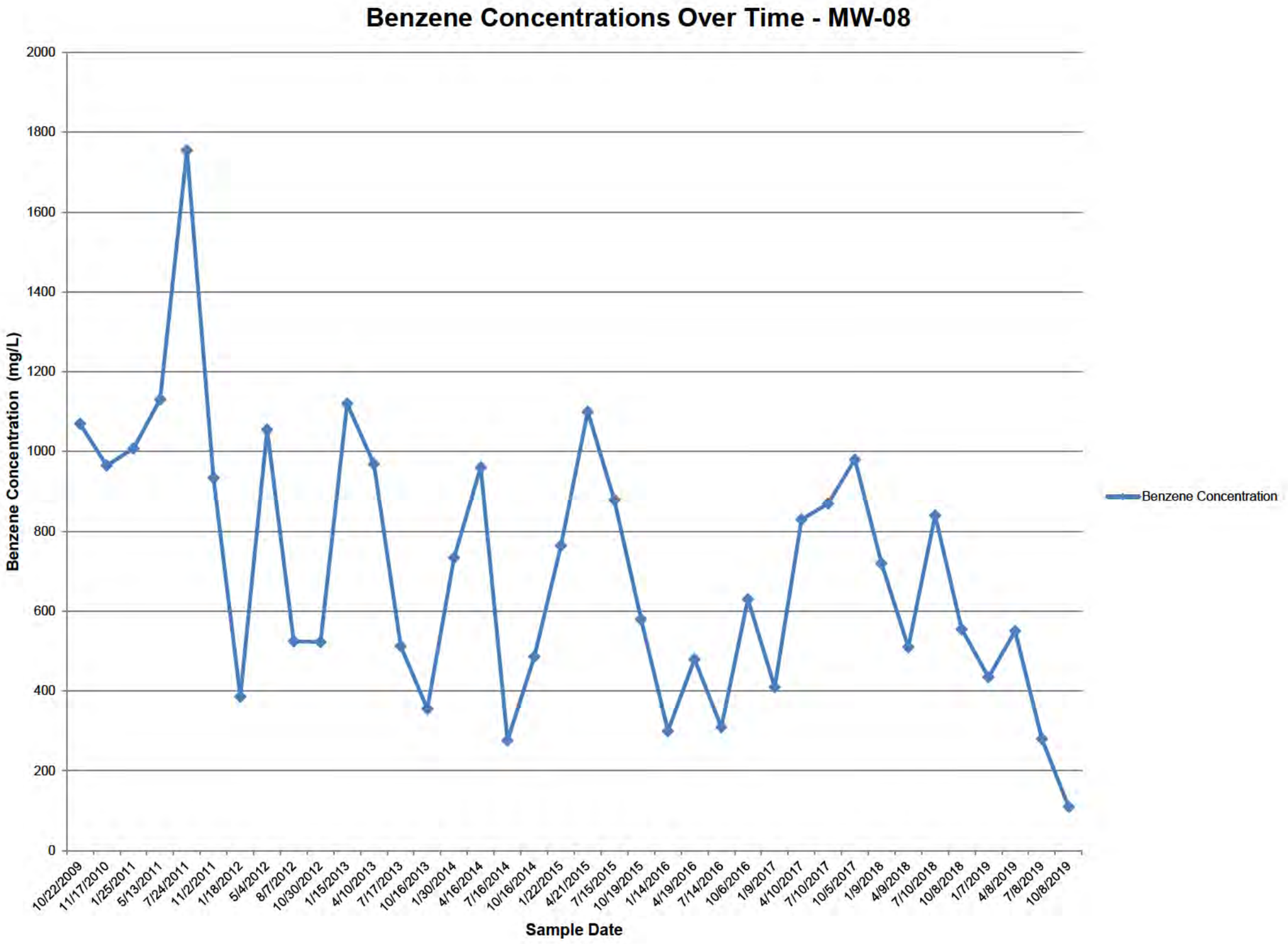
TABLE C-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
T-12	10/1/2010	2.87
	10/22/2010	4.674
	5/11/2011	2
	10/27/2011	1.09
	10/27/2011	1.4
	1/19/2012	1.51
	5/9/2012	1.7
	5/9/2012	1.48
	8/2/2012	1.64
	11/5/2012	2
	11/5/2012	2
	11/5/2012	1.71
	1/18/2013	2.03
	4/15/2013	2.2
	4/15/2013	2.2
	4/15/2013	1.61
	7/16/2013	1.65
	10/15/2013	1.1
	10/15/2013	2.02
	1/24/2014	2.48
	4/15/2014	2.07
	4/18/2014	1.4
	7/8/2014	2.1
	10/17/2014	1.5
	10/17/2014	1.4
	10/17/2014	1.83
	1/19/2015	2.02
	4/15/2015	2
	4/15/2015	1.7
	4/15/2015	1.69
	7/10/2015	2.3
	10/15/2015	2.5
	1/12/2016	1.5
	4/15/2016	1.4
	7/12/2016	1.6
	10/17/2016	1.7
	10/17/2016	2.1
	1/12/2017	1.5
	4/6/2017	1.4
	7/13/2017	1.2
	10/13/2017	1.4
	1/10/2018	2
	4/12/2018	1.7
	7/11/2018	2.1
	10/16/2018	2.2
	1/10/2019	2
	4/17/2019	1.8
	7/15/2019	1.7
	10/15/2019	2.6

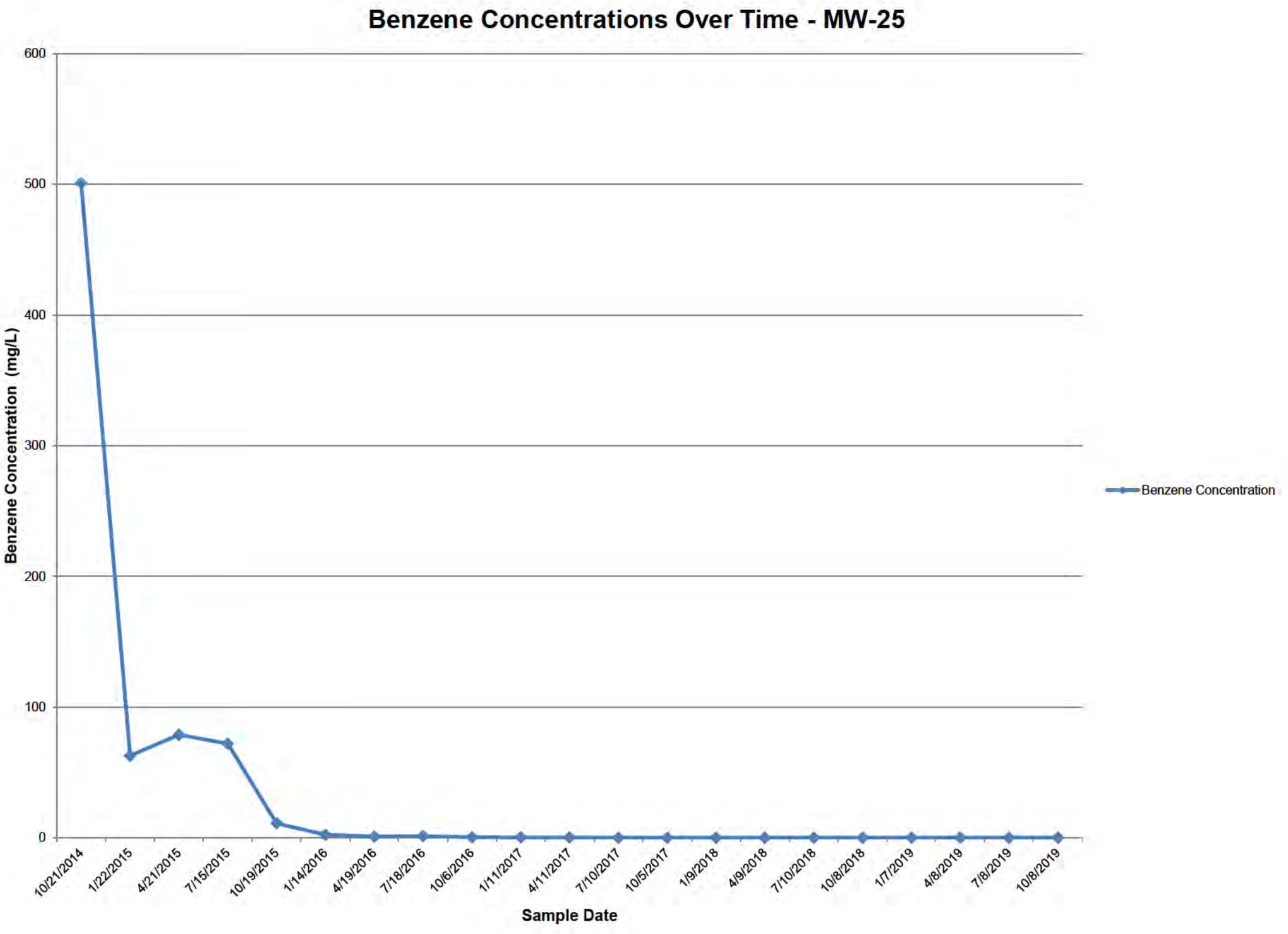
Notes:
mg/L = milligrams per liter
ND = non-detect
Dates specific to available data.



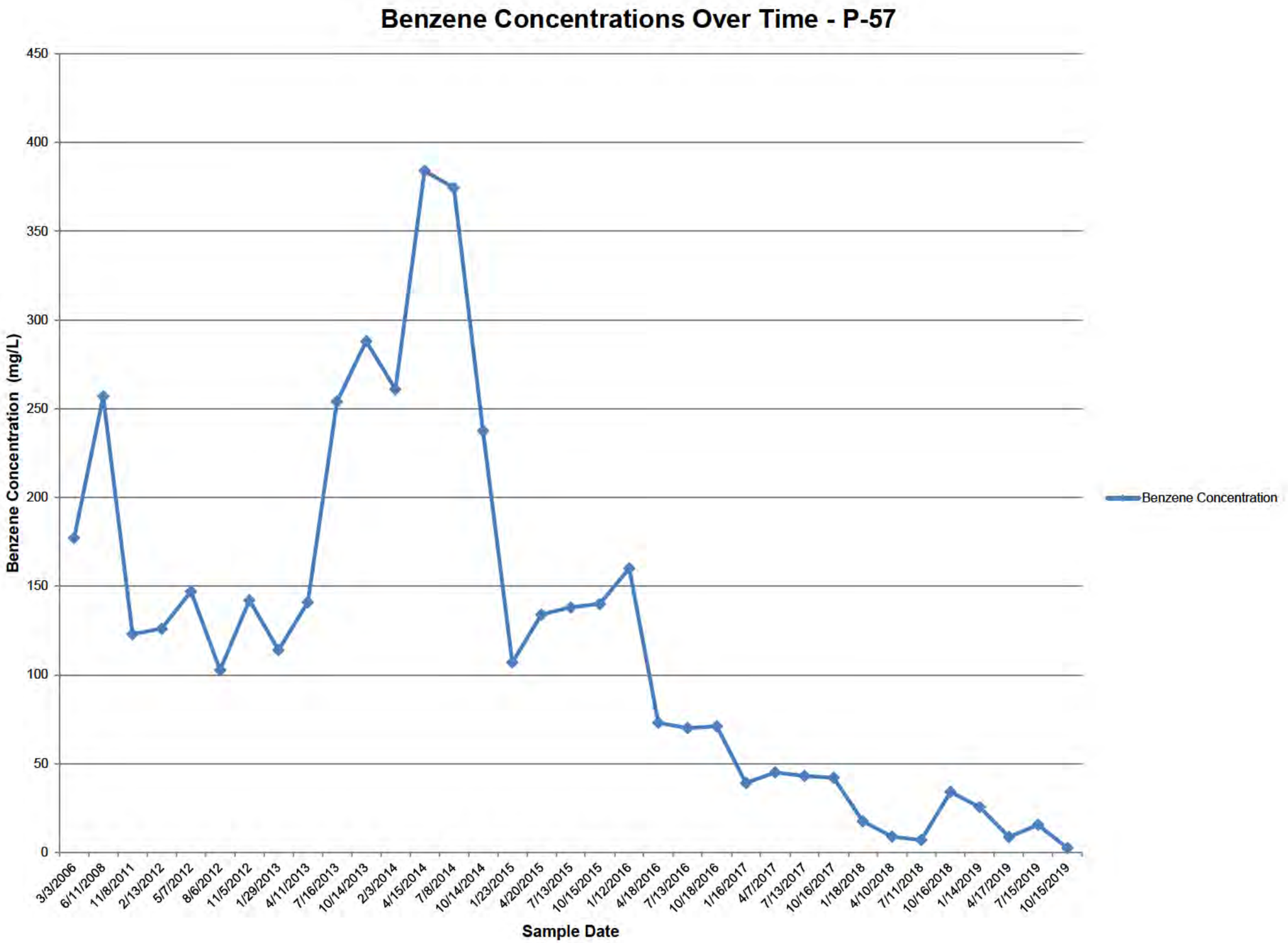
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



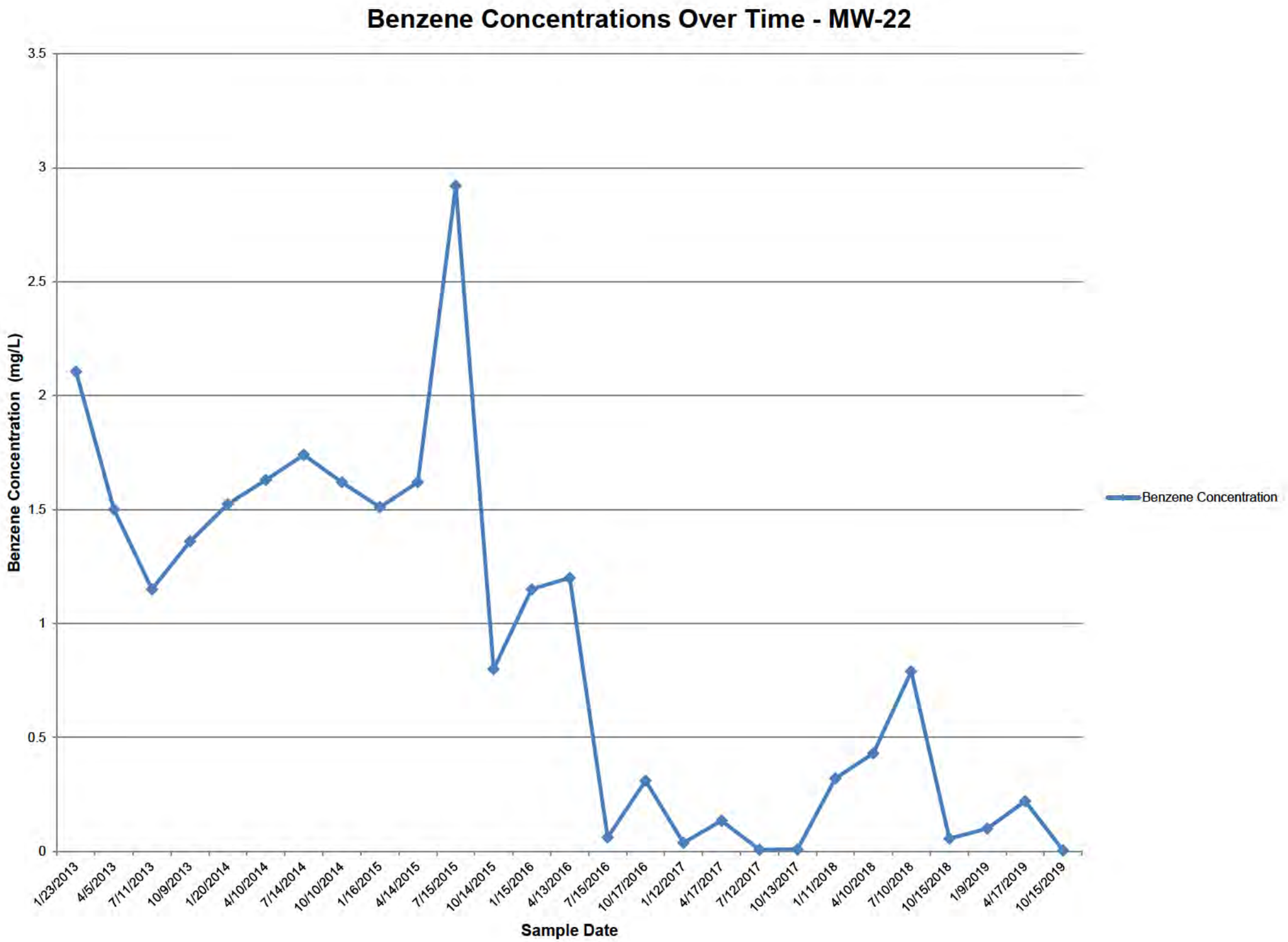
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



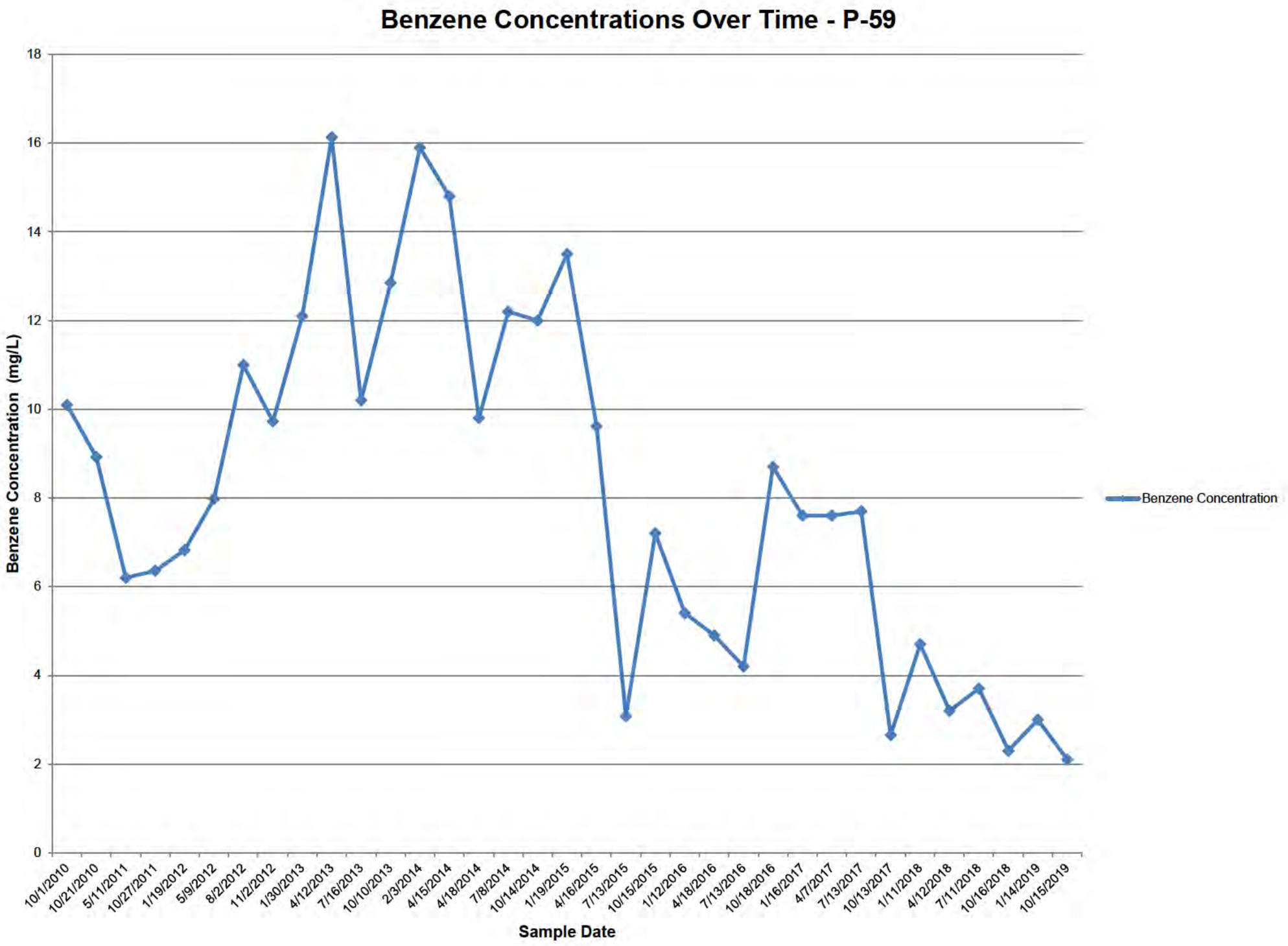
Notes:
mg/L = milligrams per liter
Timeframe specific to available data.



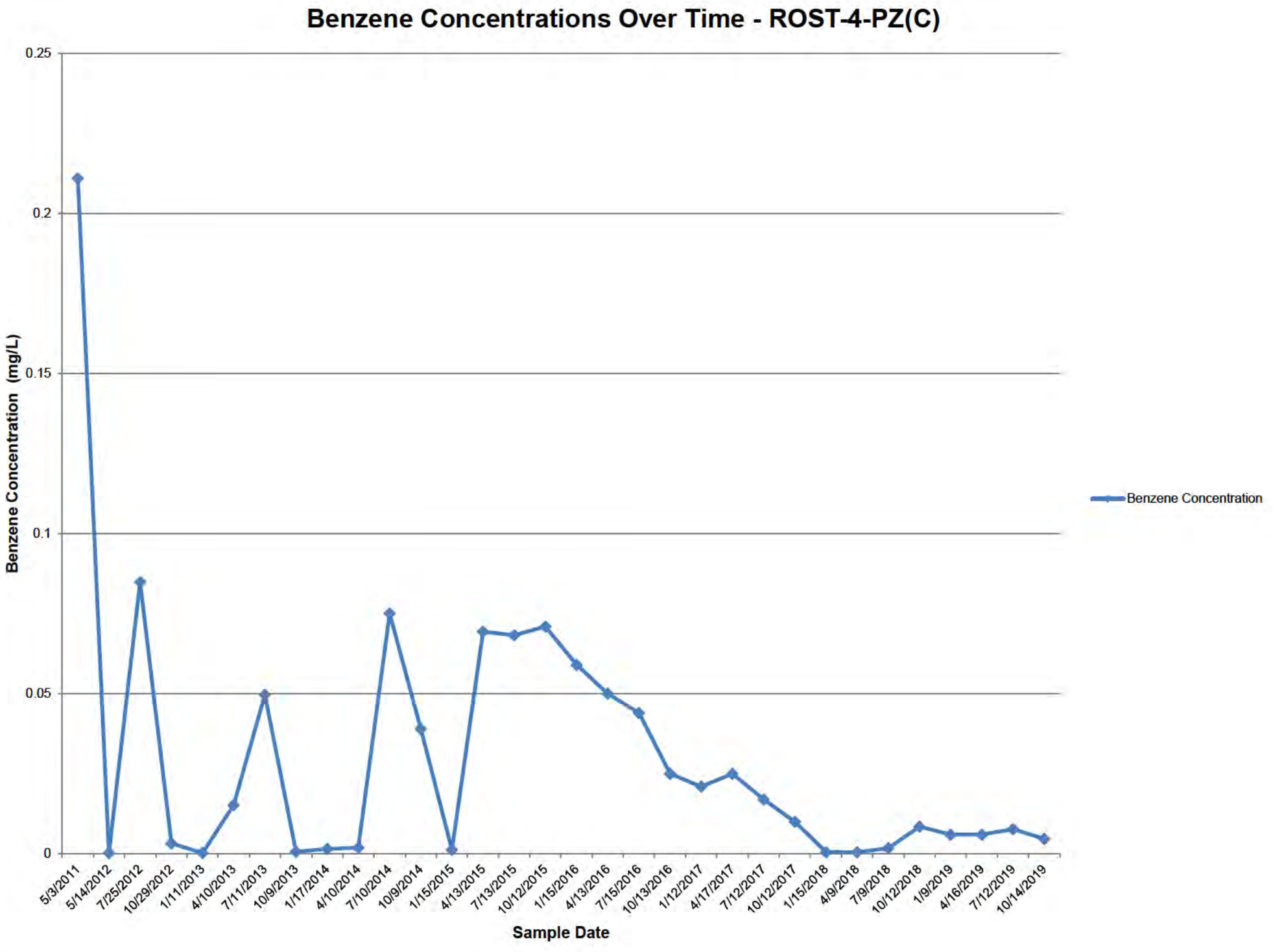
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



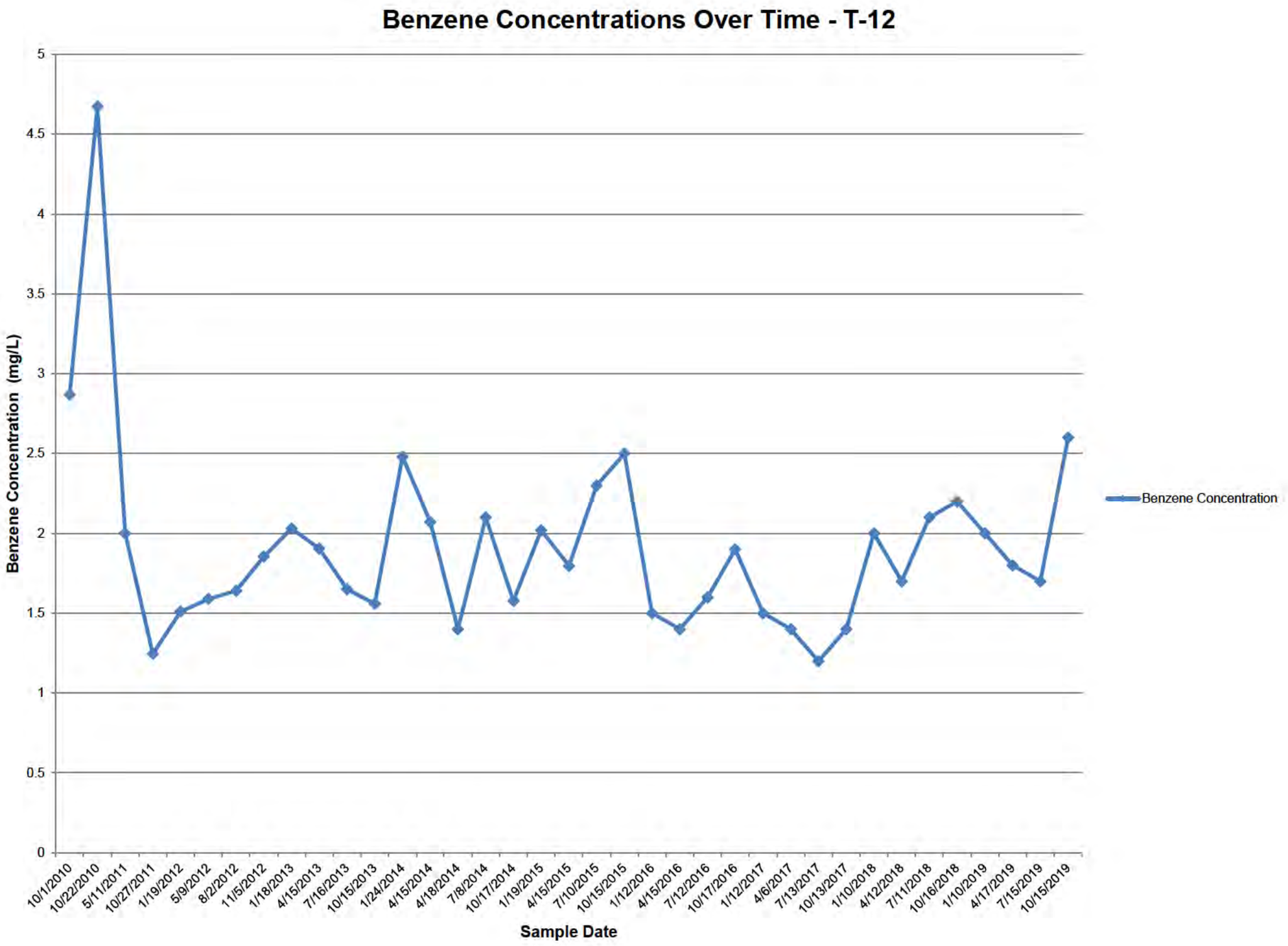
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



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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